DOCUMENT RESUME

ED 143 534 SE 023 013

AUTHOR	Chinn, William G.; And Others
TITLE	Mathematics for the Elementary School, Book 1 (Part 2). Student Text. Special Edition (Revised).
INSTITUTION	Stanford Univ., Calif. School Mathematics Study Group.
SPONS AGENCY	National Science Foundation, Washington, D.C.
PUB DATE	66
NOTE	152p.; For related documents, see SE 023 011-014
EDRS PRICE	MF-$0.83 HC-$8.69 Plus Postage.
DESCRIPTORS	*Arithmetic; Disadvantaged Youth; Elementary Education; *Elementary School Mathematics; Geometry; Grade 1; *Instructional Materials; Mathematics; *Number Concepts; *Textbooks
IDENTIFIERS	*School Mathematics Study Group

ABSTRACT

In this text, the writers have relied on the SMSG kindergarten and first grade materials as a framework. This special edition is designed to meet the needs of disadvantaged children. Chapters 5 through 10 are included in this part. Chapter topics include: (5) Recognizing Geometric Figures; (6) Place Value and Numeration; (7) Addition and Subtraction; (8) Arrays and Multiplication; (9) Partitions and Rational Numbers; and (10) Linear Measurement. The activities and exercises include brief directions. (RH)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED143534

MATHEMATICS FOR THE ELEMENTARY SCHOOL

BOOK 1 (Part 2)

Student Text

SPECIAL EDITION (Revised)

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

SMSG

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND THE ERIC SYSTEM CONTRACTORS.

The following is a list of all those who participated in the preparation of this volume:

William G. Chinn, San Francisco Unified School District, San Francisco, California
M. E. Dunkley, SMSG, Stanford University
Mary O. Folsom, University of Miami, Florida
E. Glenadine Gibb, State College of Iowa
Lenore John, University of Chicago Laboratory School, Chicago, Illinois
Gloria Leiderman, SMSG, Stanford University
Emma M. Lewis, District of Columbia Public Schools, Washington, D. C.
Susan H. Talbot, Gunn High School, Palo Alto, California
J. Fred Weaver, Boston University
Margaret F. Willerding, San Diego State College

SE 023 013

© 1965 and 1966 by The Board of Trustees of the Leland Stanford Junior University
All rights reserved
Printed in the Uni ed States of America

Permission to make verbatim use of material in this book must be secured from the Director of SMSG. Such permission will be granted except in unusual circumstances. Publications incorporating SMSG materials must include both an acknowledgment of the SMSG copyright (Yale University or Stanford University, as the case may be) and a disclai ner of SMSG endorsement. Exclusive license will not be granted save in exceptional circumstances, and then only by specific action of the Advisory Board of SMSG.

Financial support for the School Mathematics Study Group has been provided by the National Science Foundation.

Teachers' Commentary
TABLE OF CONTENTS

Chapter 5. RECOGNIZING GEOMETRIC FIGURES

5-1. Familiar Three-Dimensional Shapes 133-134

5-2. Simple Closed Curves 135-136

5-3. Polygons 137-140

5-4. Classifying Regions 141-146

5-5. Fitting Regions 147-150

Chapter 6. PLACE VALUE AND NUMERATION

6-1. Counting by Tens and Ones 151-152

6-2. Eleven, Twelve, and the Teens 153-155

6-3. Spoken Names of the Numbers: 21 Through 99 . .

6-4. The Written Numerals: 20 Through 99 156-157

6-5. Order Relations for Numbers 0 Through 99 158-177

Chapter 7. ADDITION AND SUBTRACTION

7-1. Partitions and Addition 178-185

7-2. Partitions and Subtraction 186-201

7-3. Addition and Subtraction on the Number Line. . . 202-208

7-4. How Many More? 209-212

7-5. Problem Solving and Equations 213-223

7-6. Addition and Subtraction: Numbers Greater Than Ten . . . . . .

Chapter 8. ARRAYS AND MULTIPLICATION

8-1. Arrays 224-230

8-2. Multiplication 231-233

8-3. Simple Properties of Multiplication 234-238

Chapter 9. PARTITIONS AND RATIONAL NUMBERS

9-1. Partitioning Sets into Equivalent Subsets 239-244

9-2. Partitioning Into a Given Number of Equivalent Sets 245-247

9-3. Parts of Regions and Sets 248-251

9-4. One-Half 252-254

9-5. One-Third 255-258

9-6. Using Rational Numbers 259-262

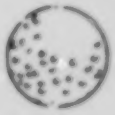
Chapter 10. LINEAR MEASUREMENT

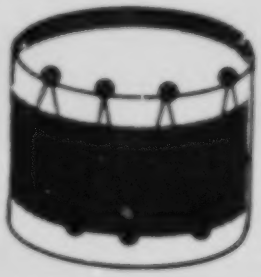
10-1. Line, Segment, Straightedge 263-266

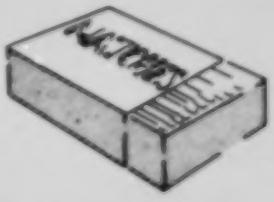
10-2. Comparing Line Segments 267-273

10-3. Measurement of Line Segments 274-275

10-4. Construction of a Ruler . . . . .



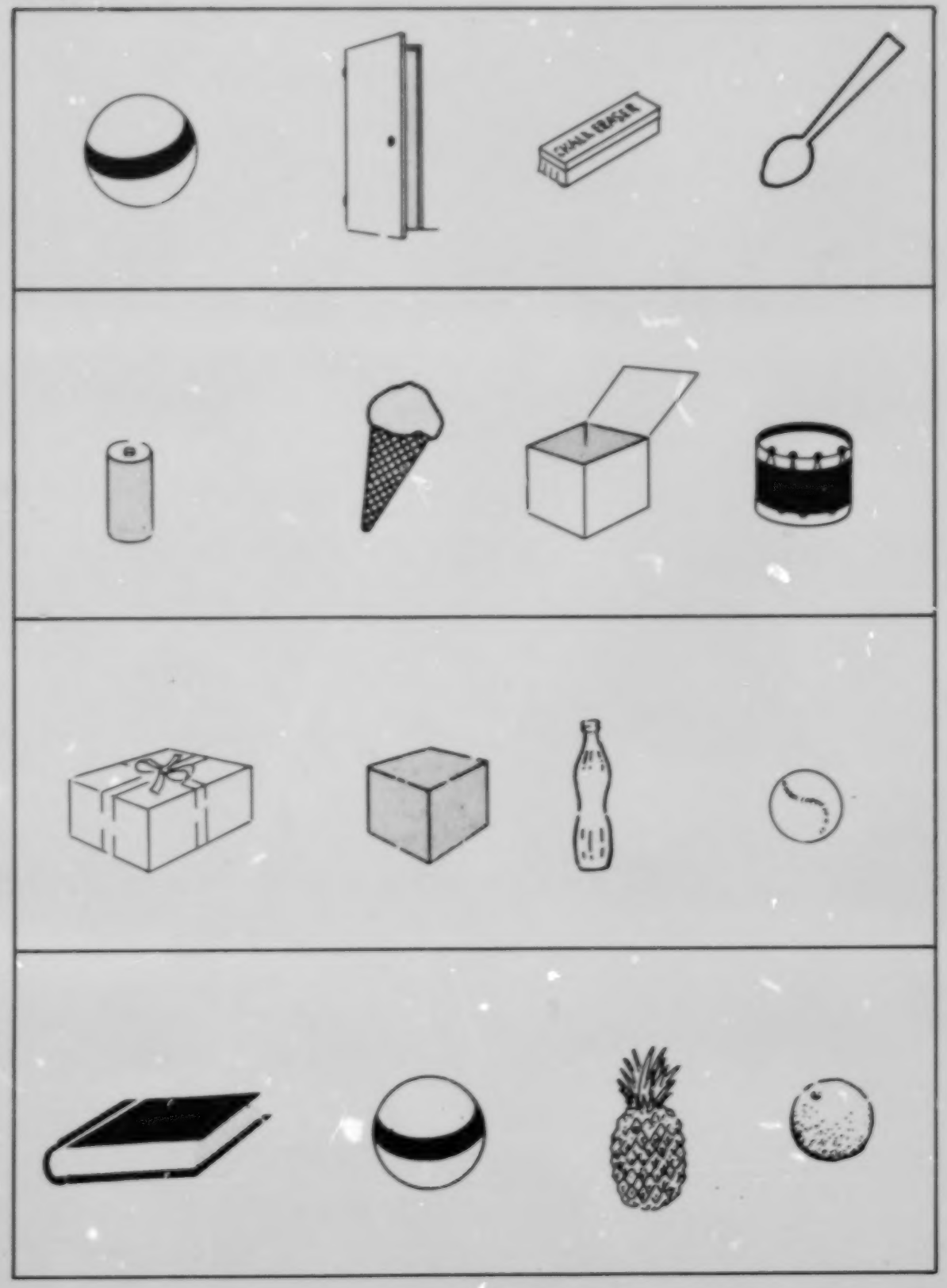




Juice Exp

Teaching Page

Shapes

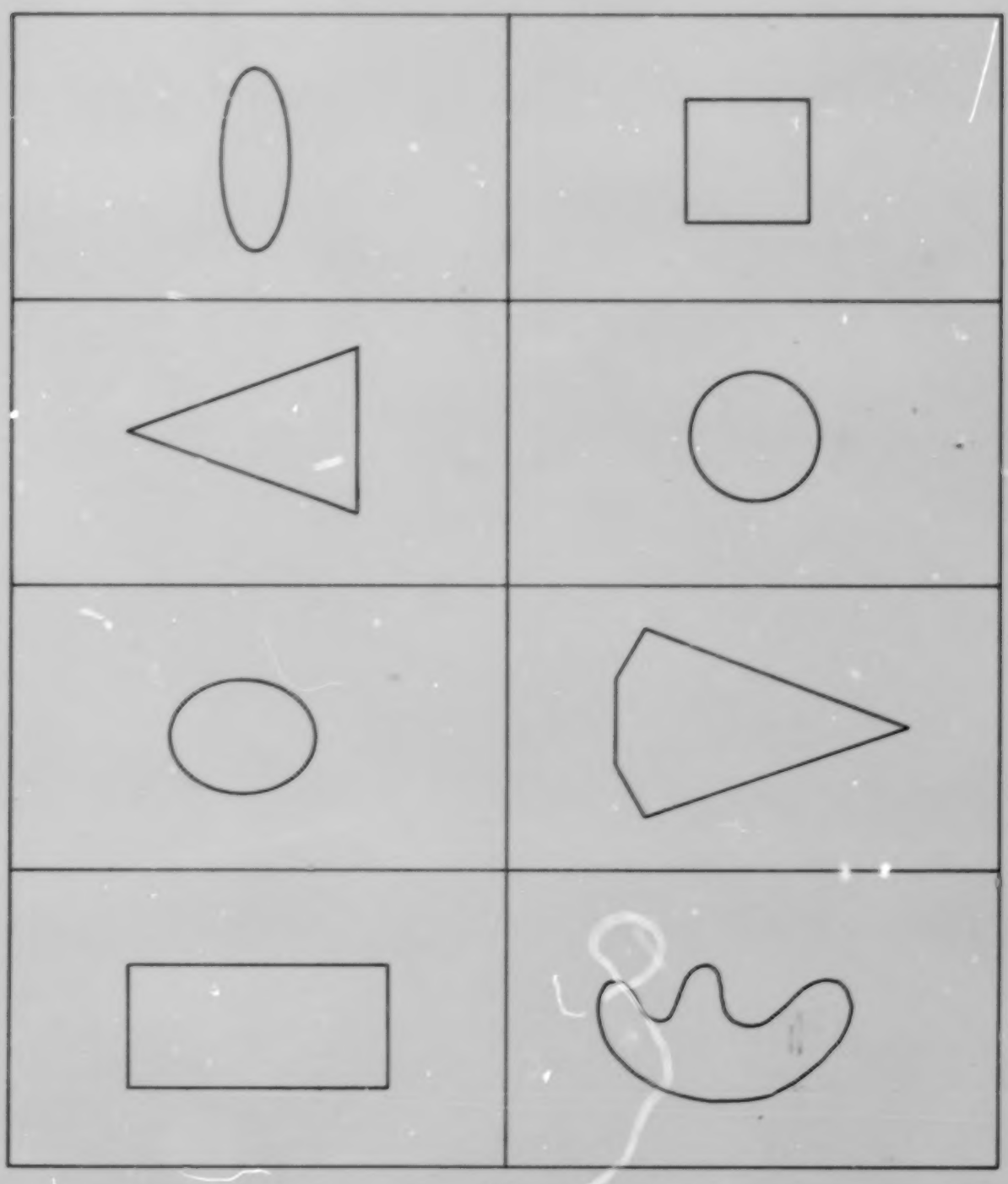


Teaching Page

Rounded or Straight

Mark each rounded figure blue.

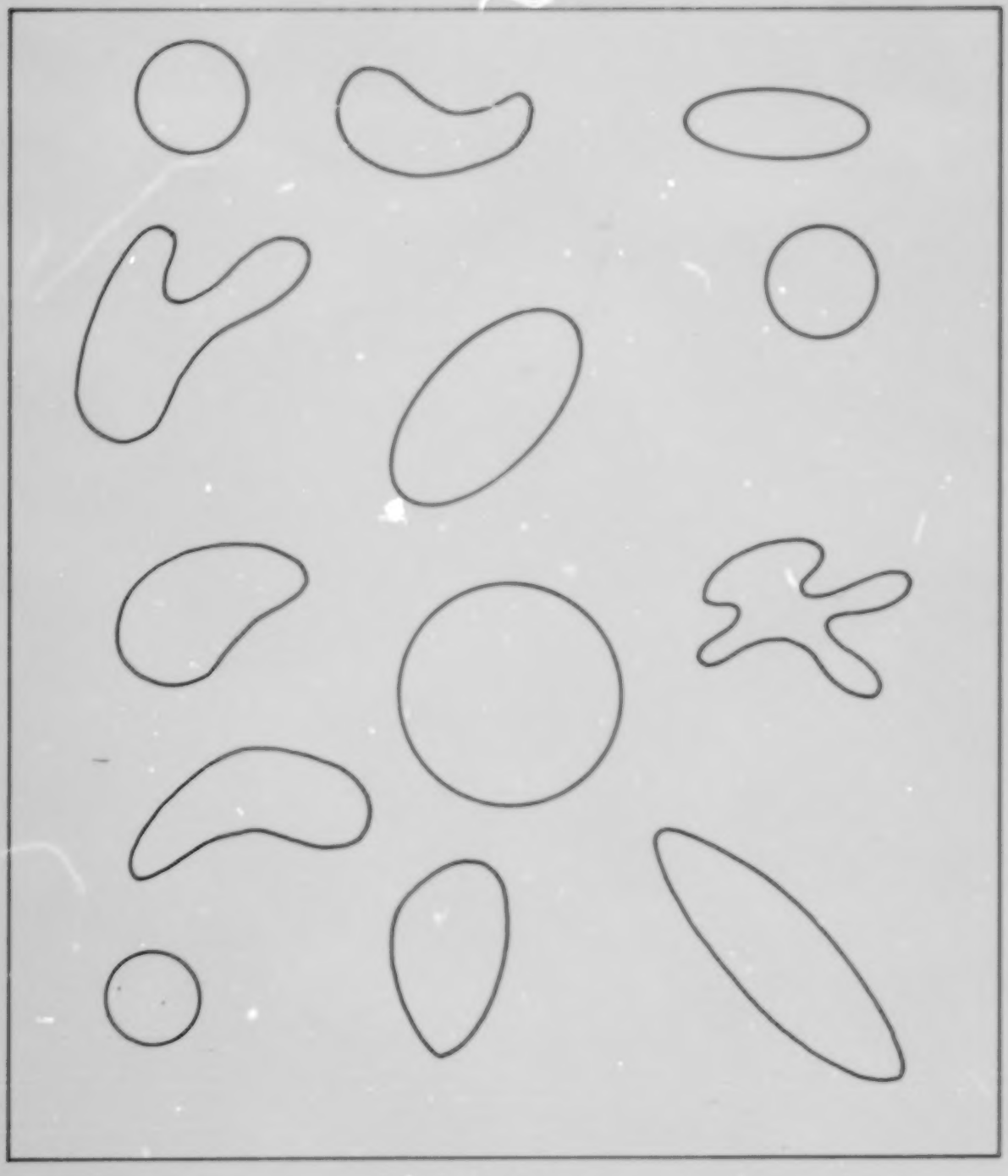
Mark each figure with straight sides red.



Circles

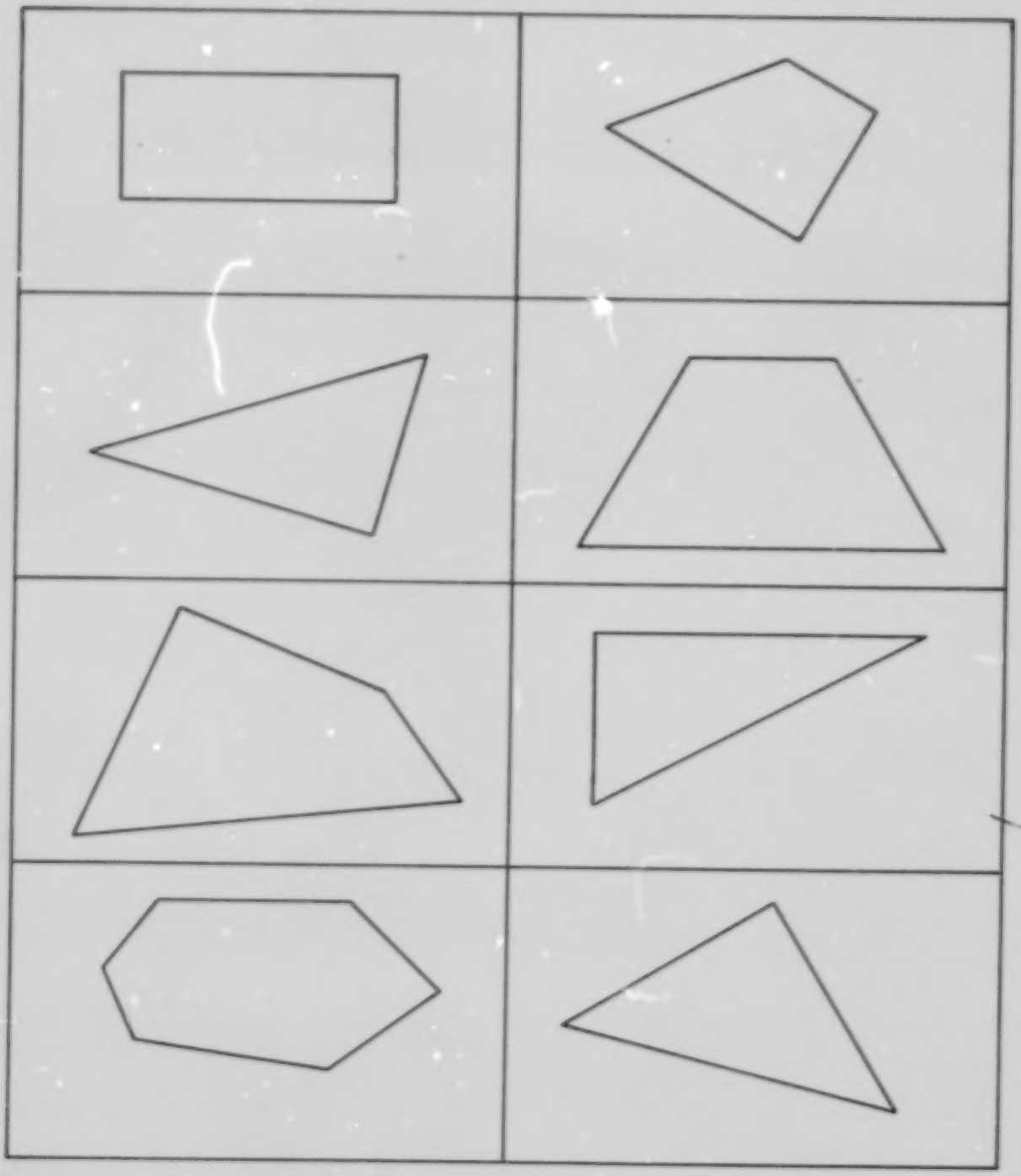
Mark each circle green.

Color the inside of the other figures red.



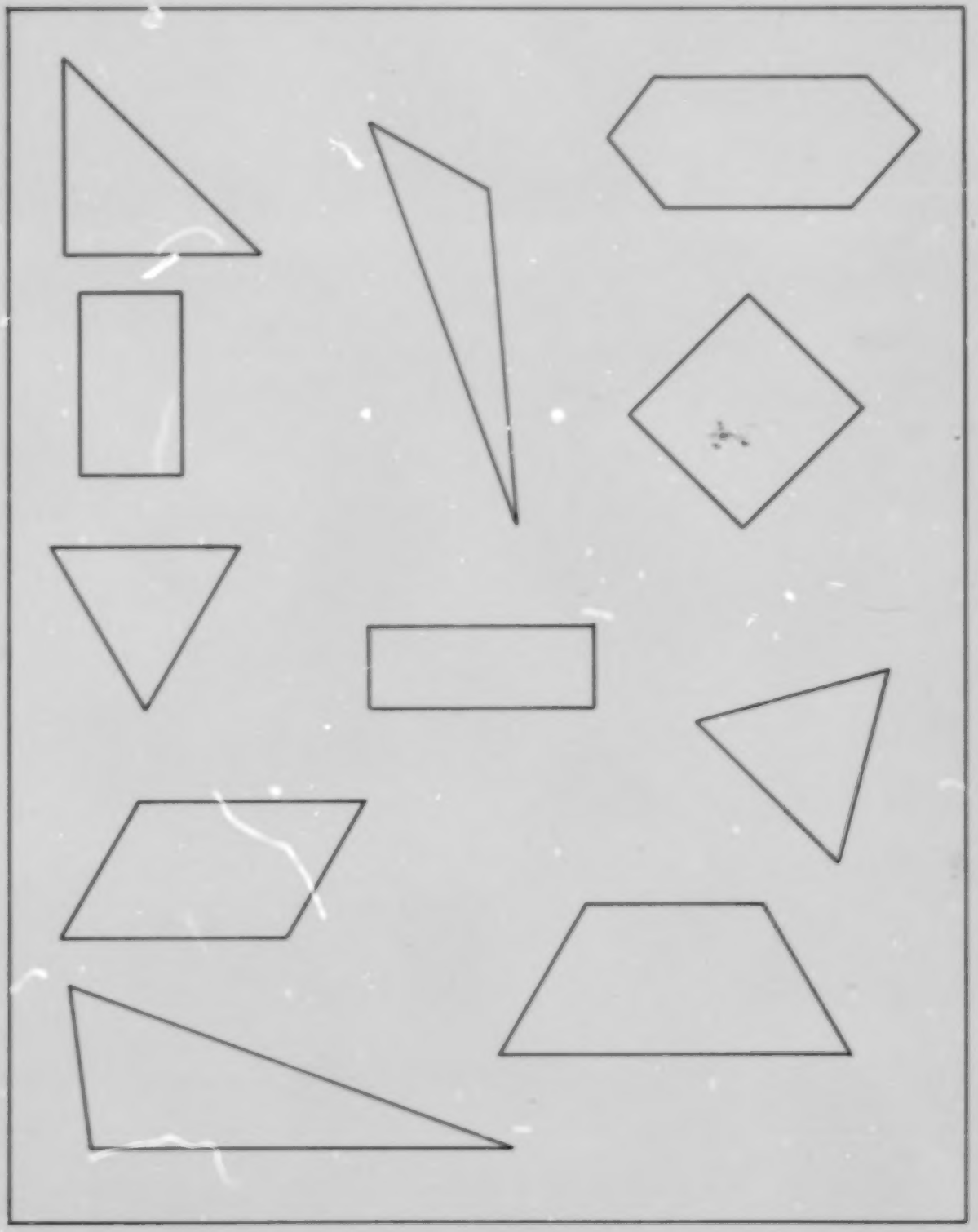
Number of Sides

Write the number of sides inside each figure.



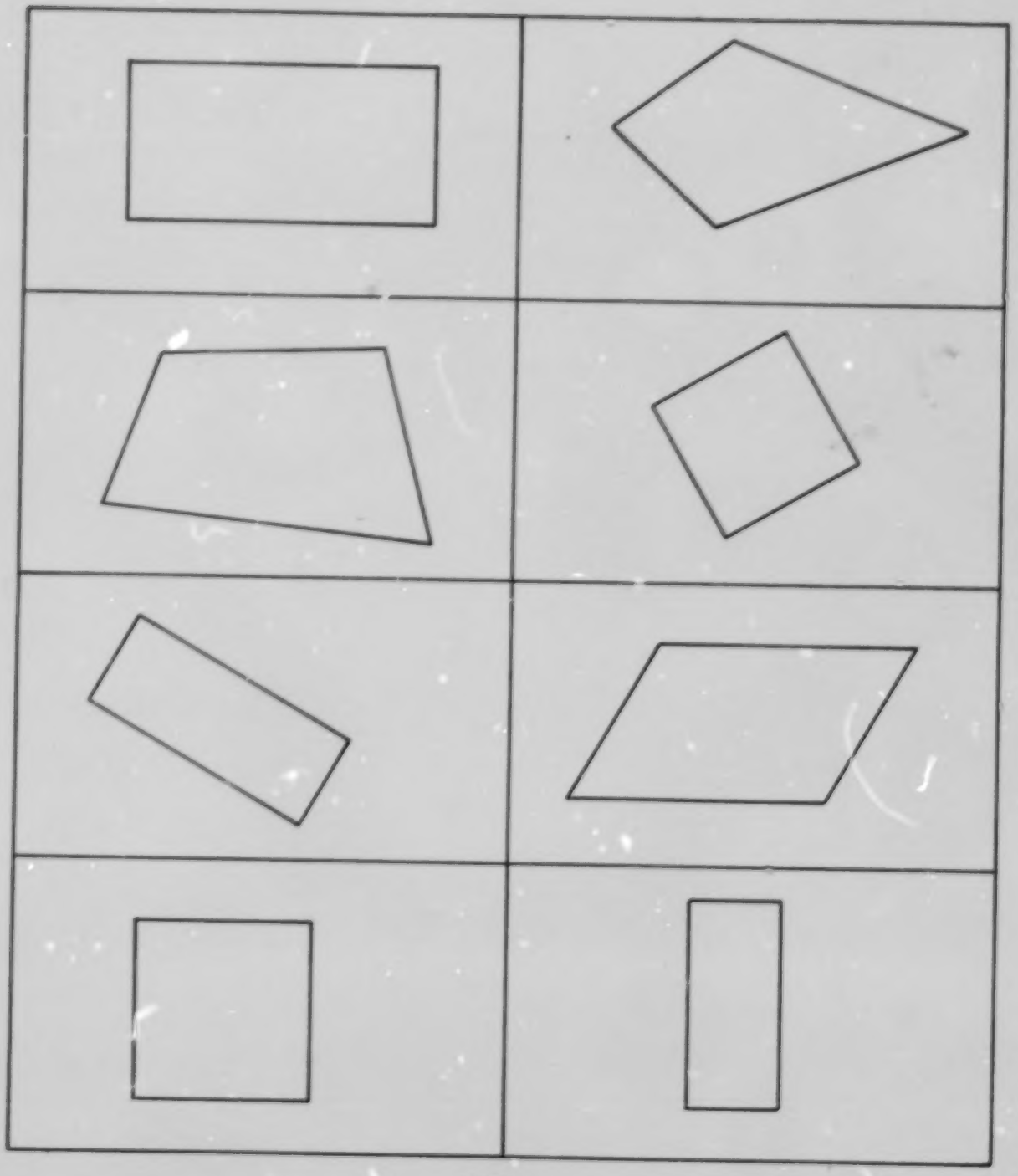
Triangles

Mark each triangle blue.



Rectanyles

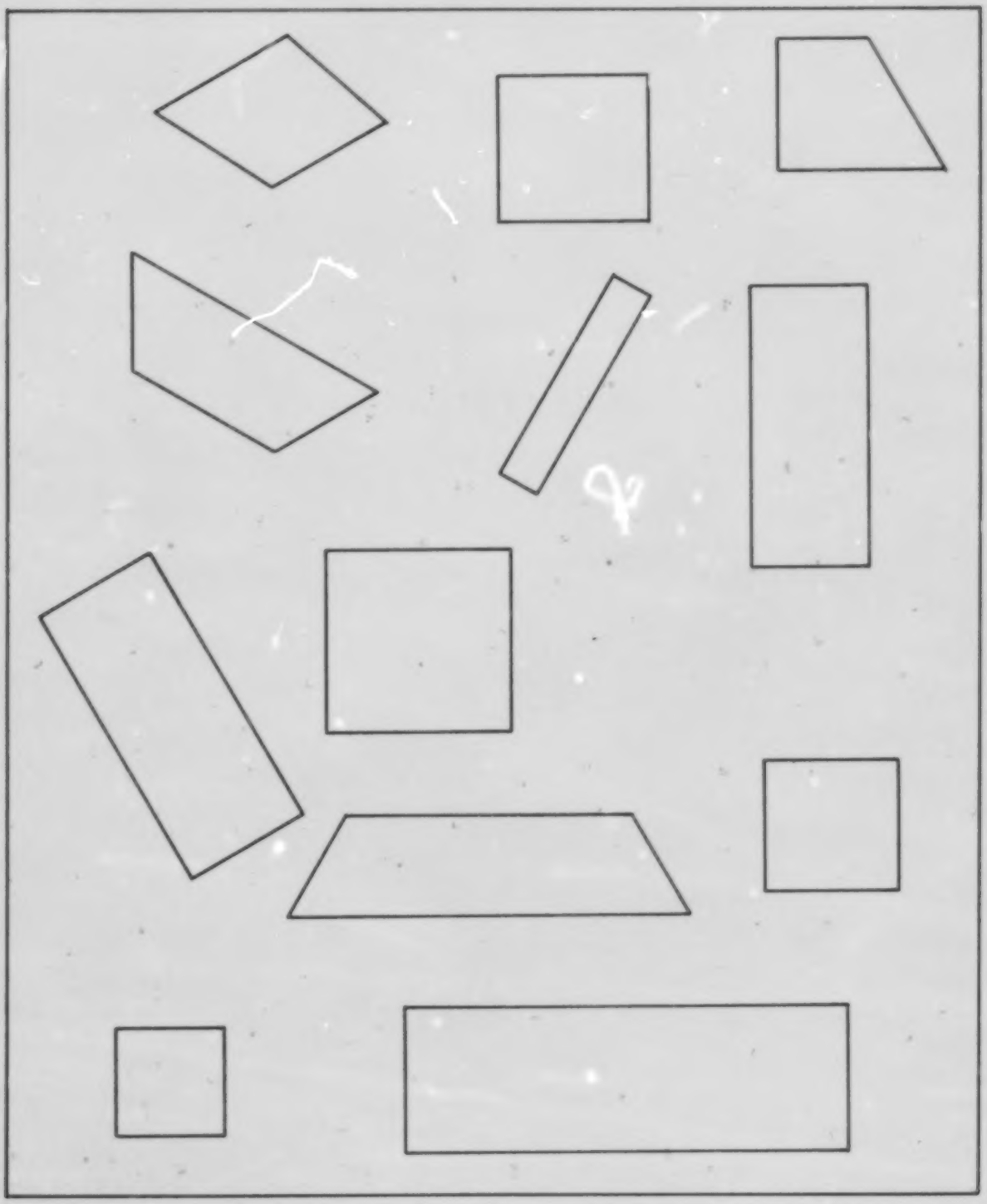
Mark each rectangle red.



Squares and Other Rectangles

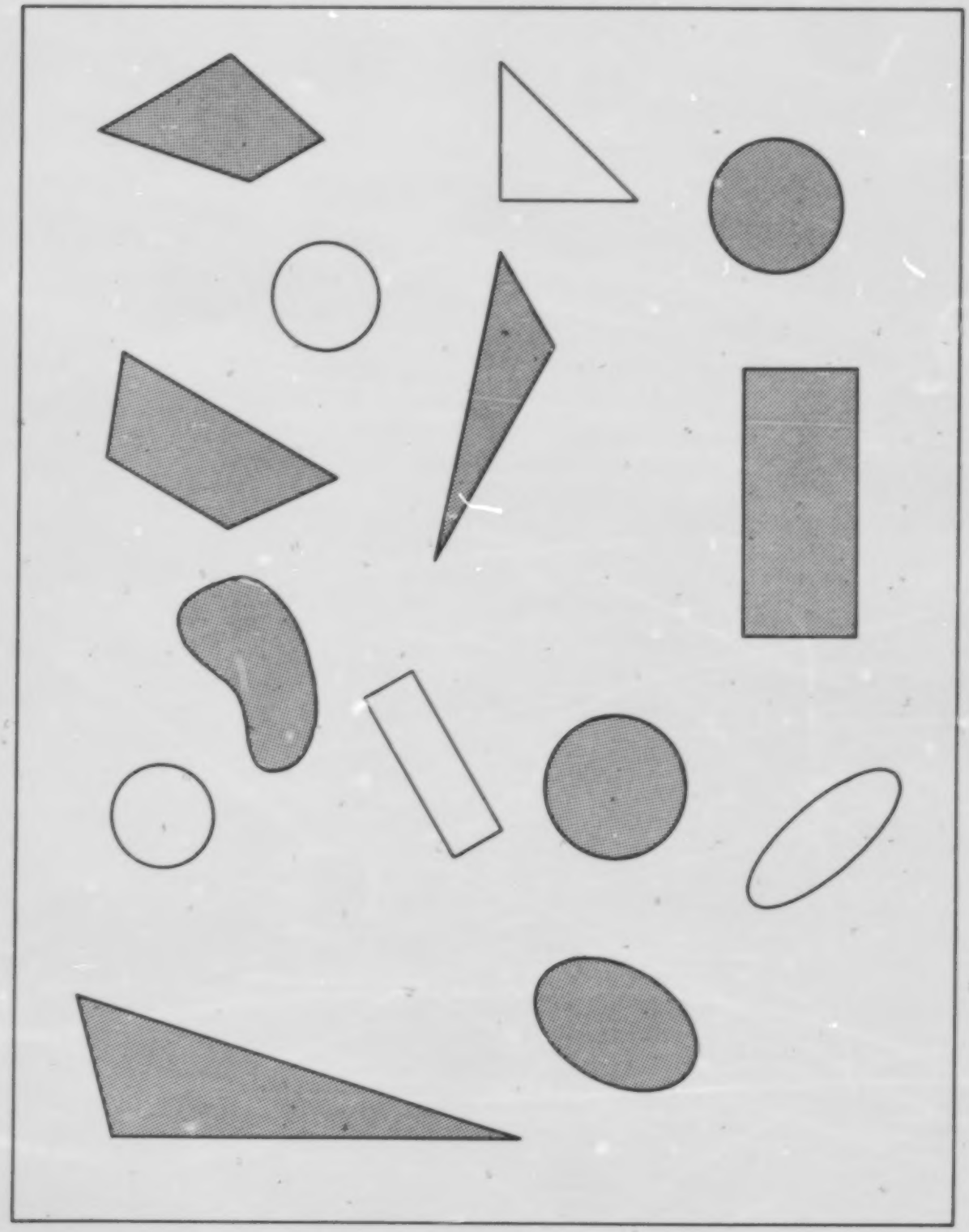
Mark each square green.

Mark all other rectangles red.



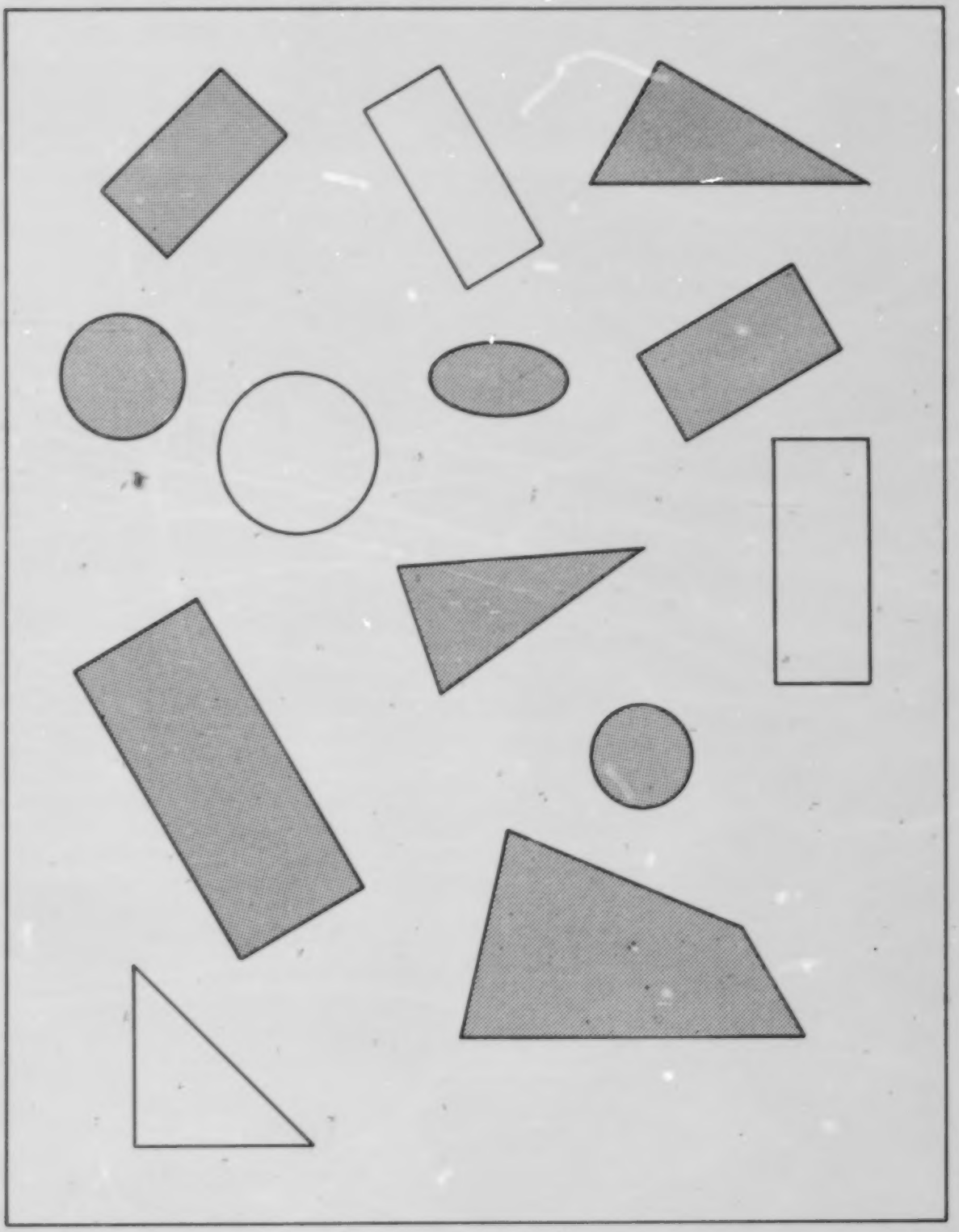
Regions

Mark the circular regions.



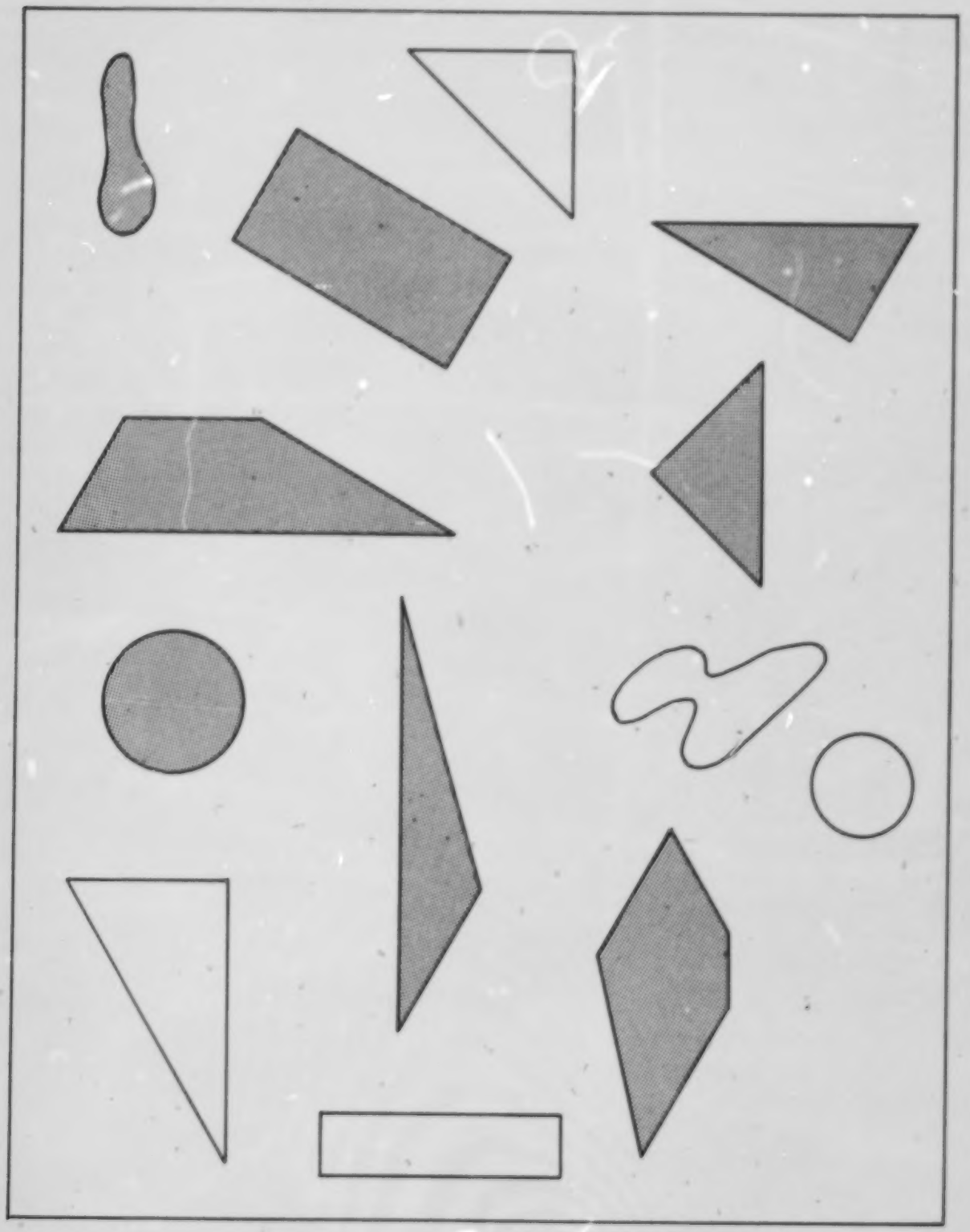
Regions

Mark each rectangular region.



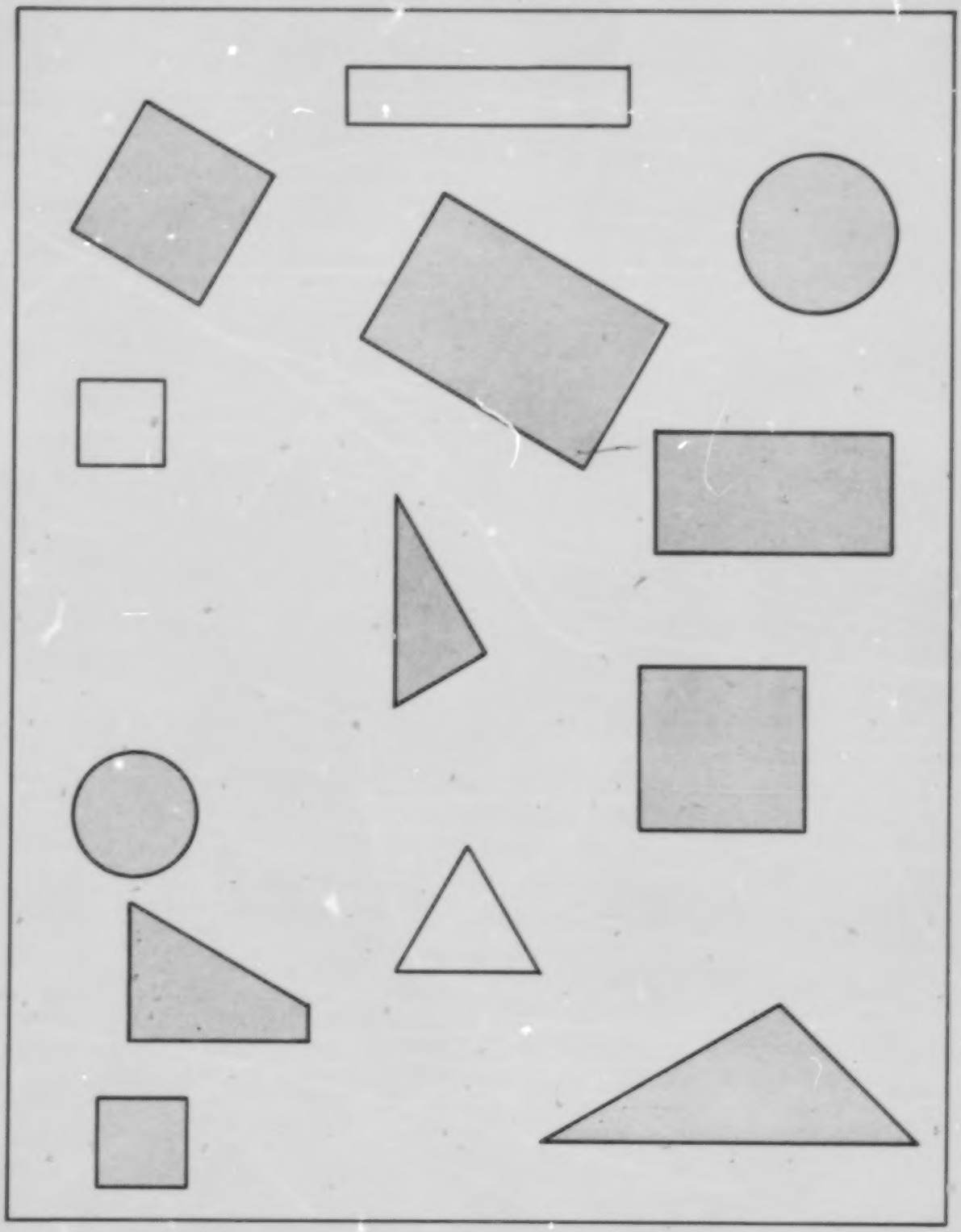
Regions

Mark the triangular regions.



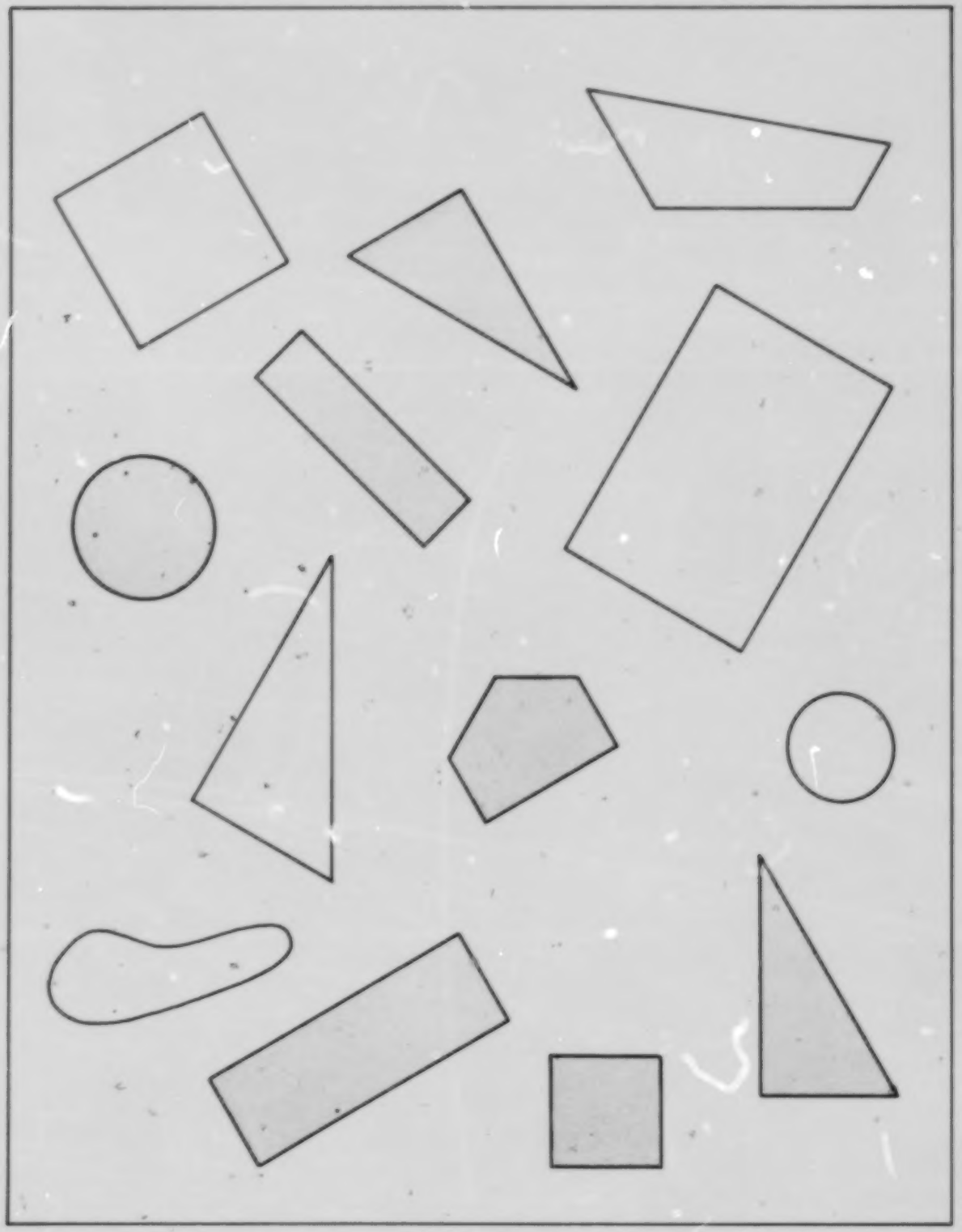
Regions

Mark each square region.



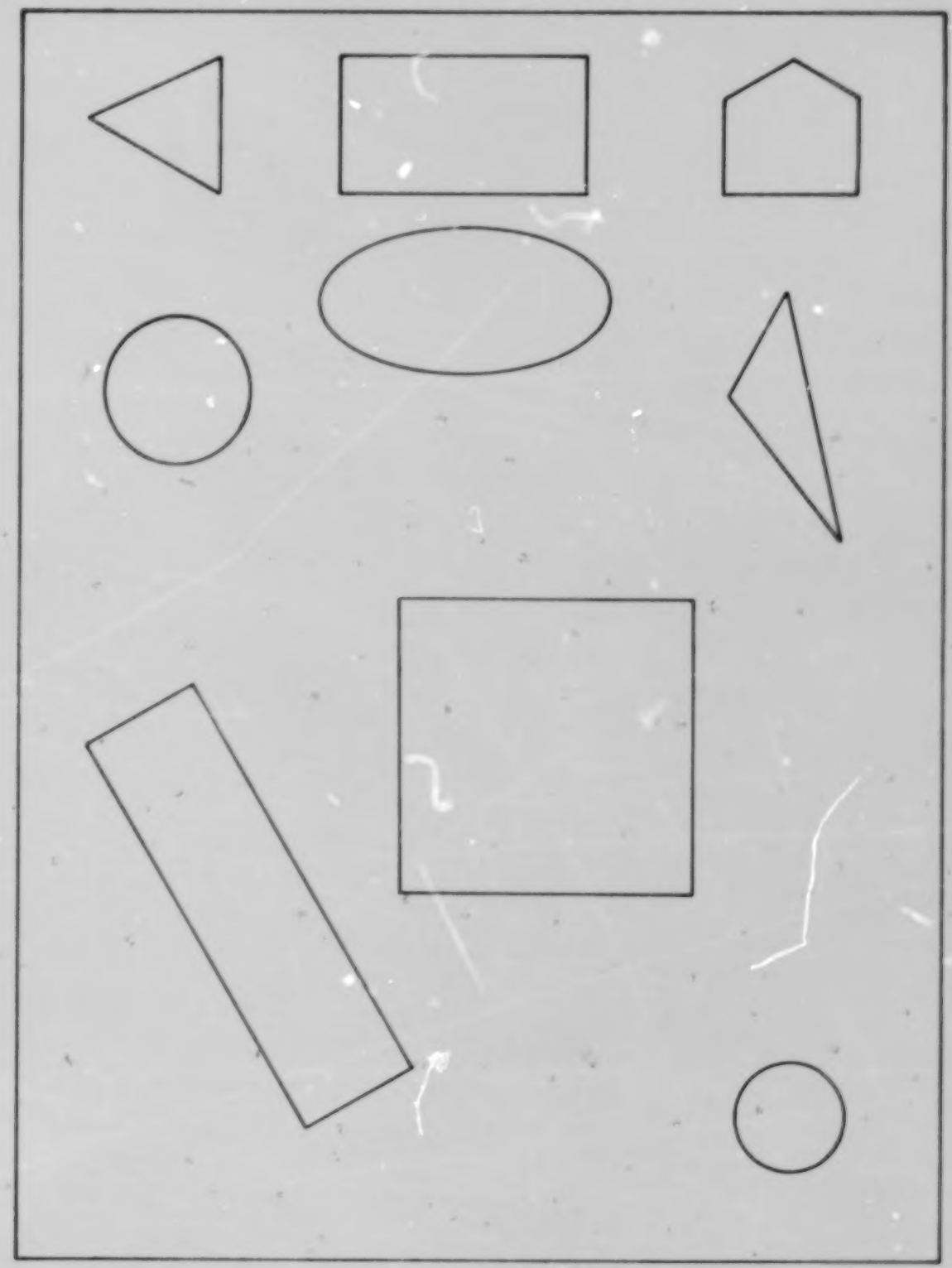
Regions

Mark an X on each of the rectangles, squares, circles and triangles.



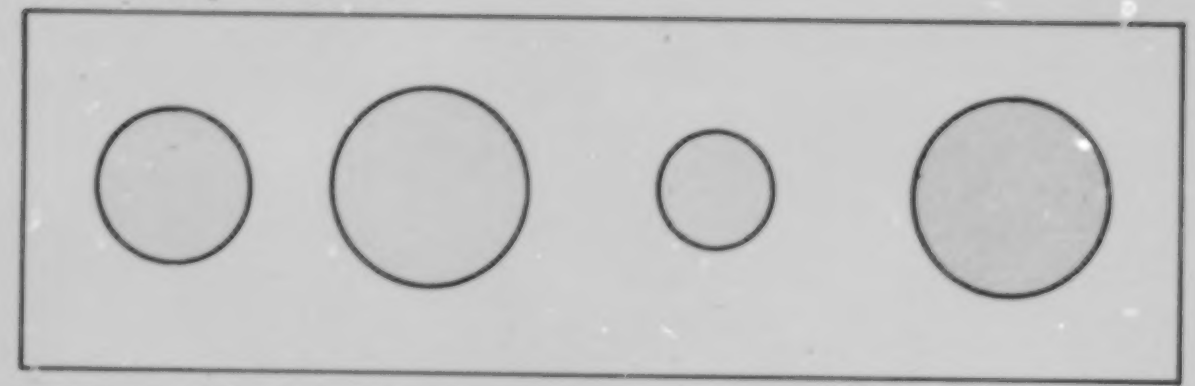
Regions

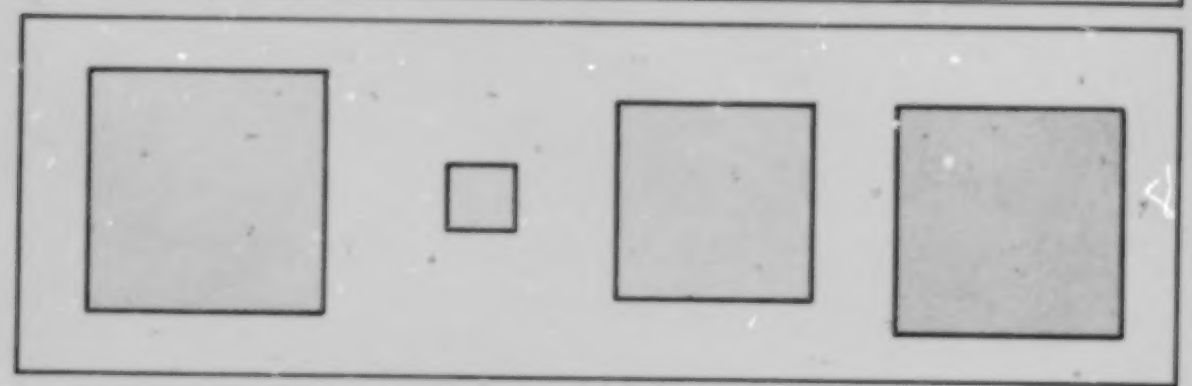
Mark an X on each of the rectangles, squares, circles, and triangles.

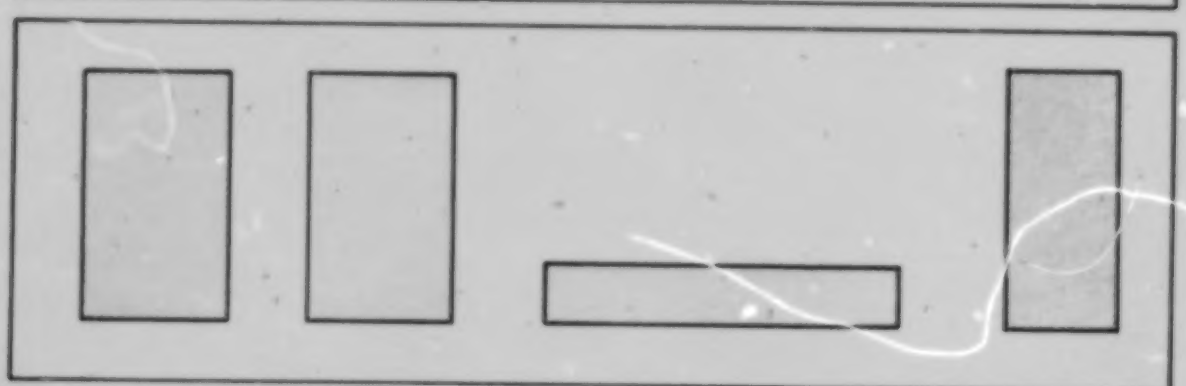


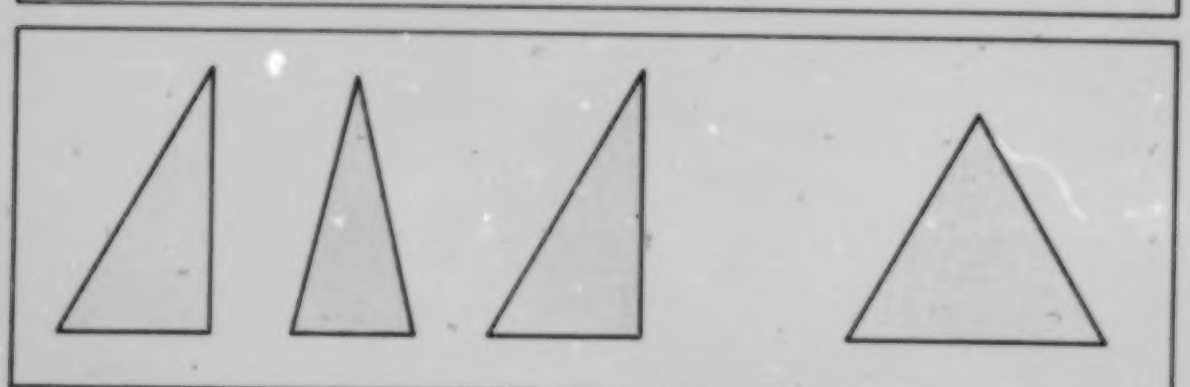
Regions that Fit

Mark the regions that fit.



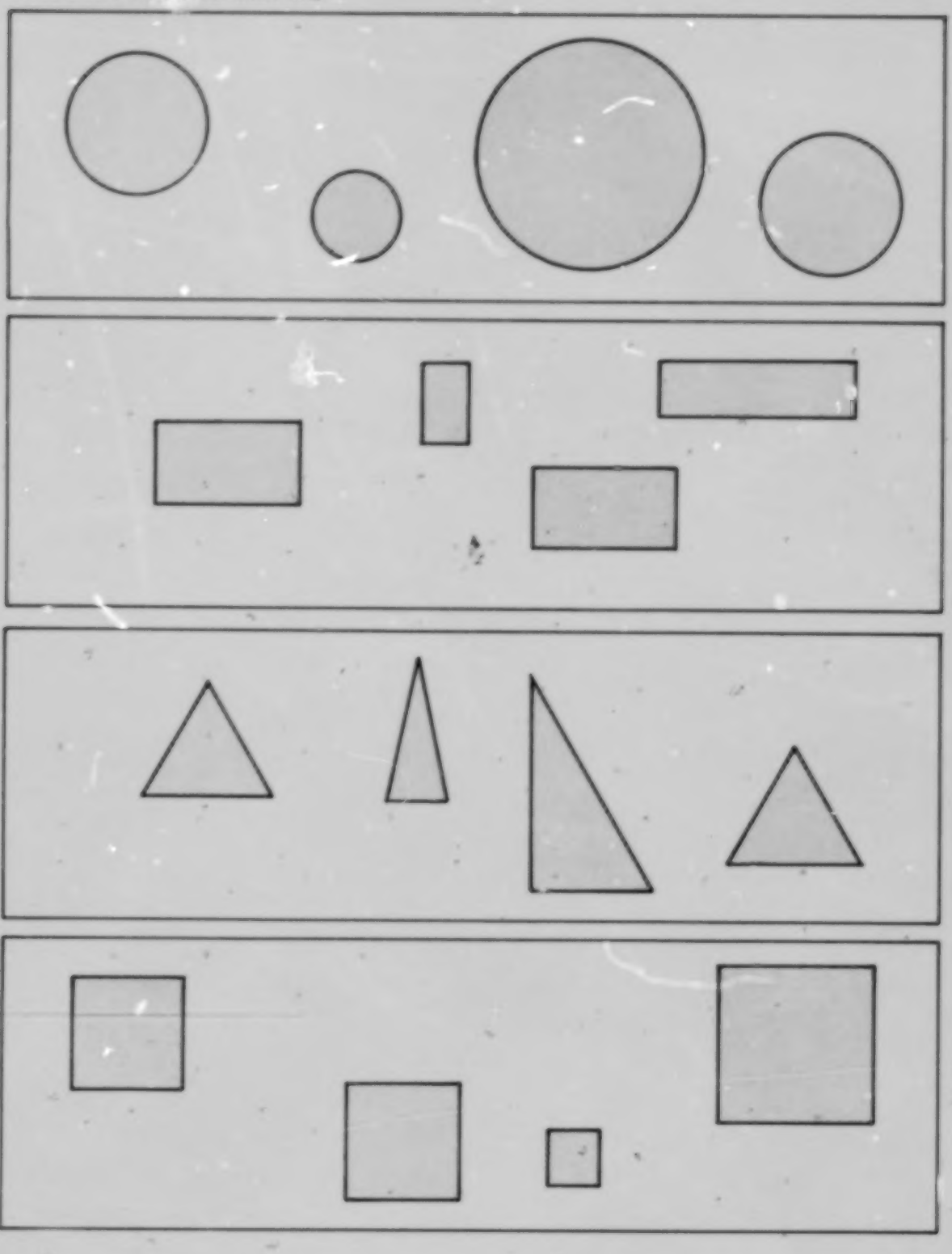






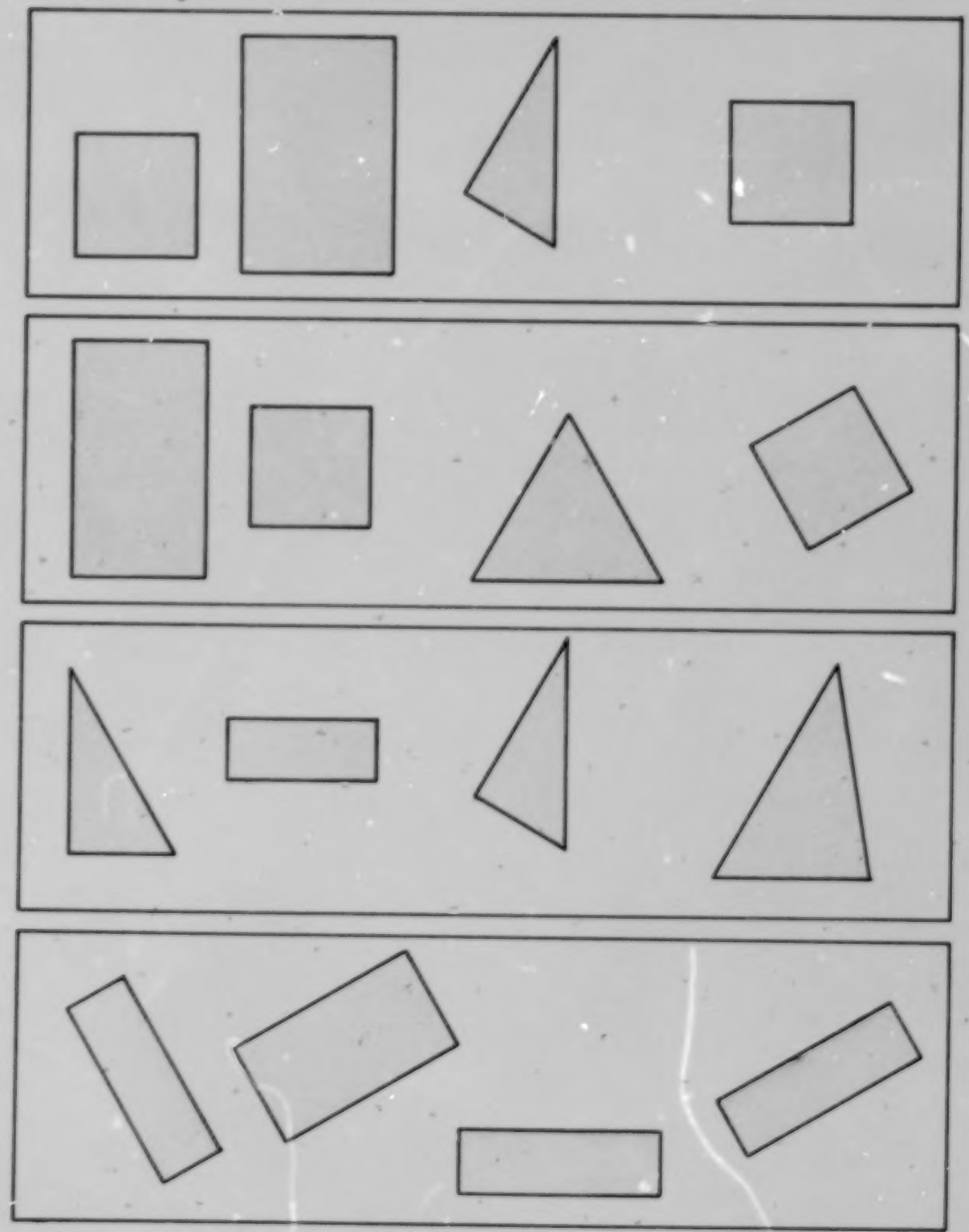
Regions that Fit

Mark the regions that fit.



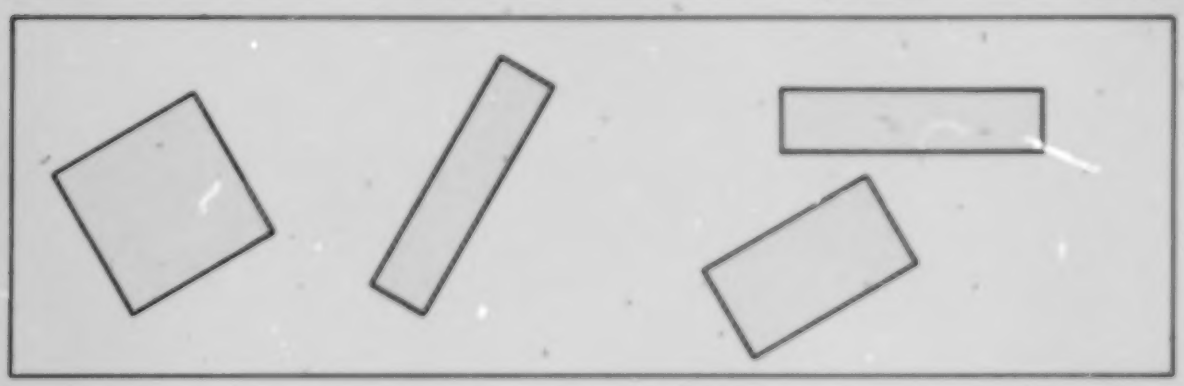
Regions that Fit

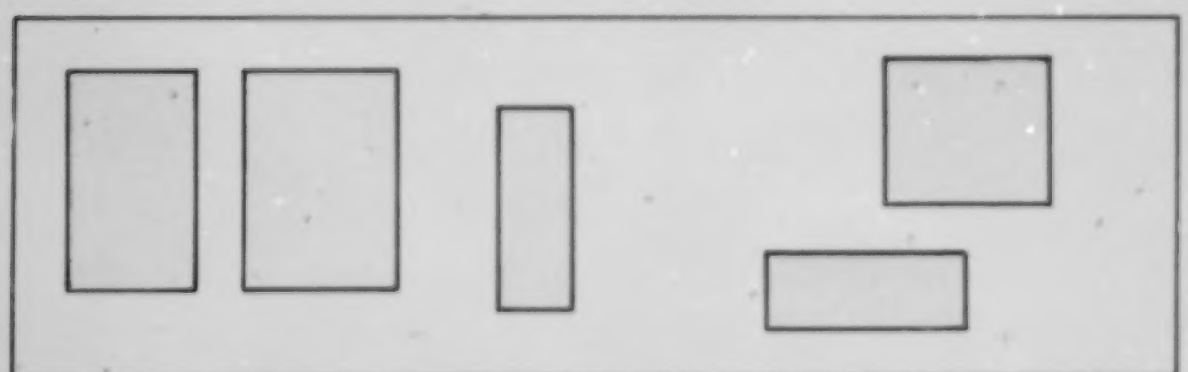
Mark the regions that fit.



Regions that Fit

Mark the regions that fit.





Tens and Ones

XXXXXXXXXX XXXXXXXXXX XX	Tens	Ones	XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX xx	Tens	Ones
XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXX	Tens	Ones	XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX	Tens	Ones
XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX X	Tens	Ones	XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX X	Tens	Ones
XXXXXXXXXX XXXXXXXXXX XXXXXX	Tens	Ones	XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXX	Tens	Ones

Tens and Ones

XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXX Tens | Ones	XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX Tens | Ones
XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX X Tens | Ones	XX Tens | Ones
XXXXXXXXXX XXXXXXXXXX XXX Tens | Ones	XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX Tens | Ones
XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXX Tens | Ones	XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XX Tens | Ones

Tens and Ones

XXXXXXXXXX Tens | Ones	XXXXXXXXXX XXXXX Tens | Ones
XXXXXXXXXX X Tens | Ones	XXXXXXXXXX XXXXXX Tens | Ones
XXXXXXXXXX XX Tens | Ones	XXXXXXXXXX XXXXXXX Tens | Ones
XXXXXXXXXX XXX Tens | Ones	XXXXXXXXXX XXXXXXXX Tens | Ones
XXXXXXXXXX XXXX Tens | Ones	XXXXXXXXXX XXXXXXXXX Tens | Ones

How many?

14

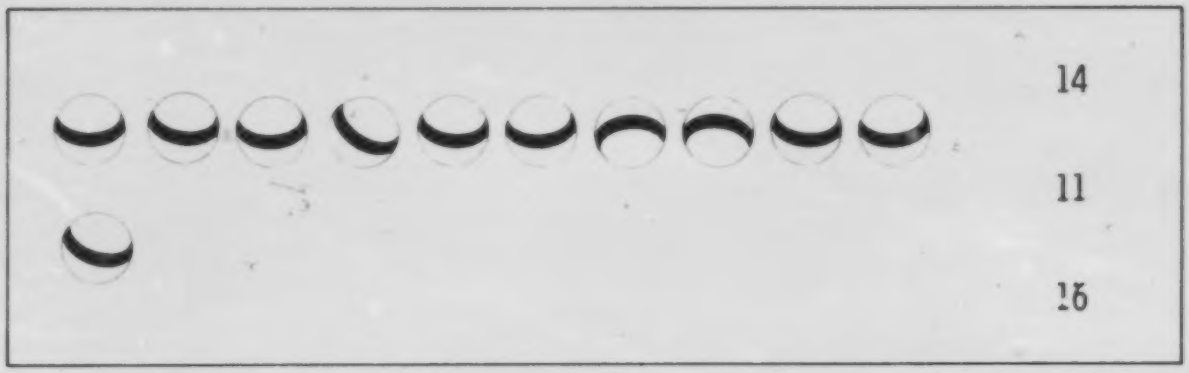
11

17

13

17

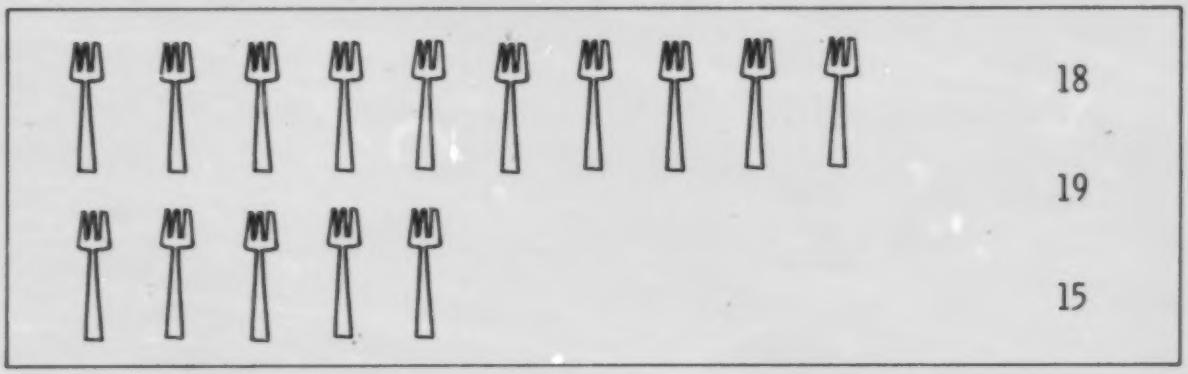
19



14

11

16

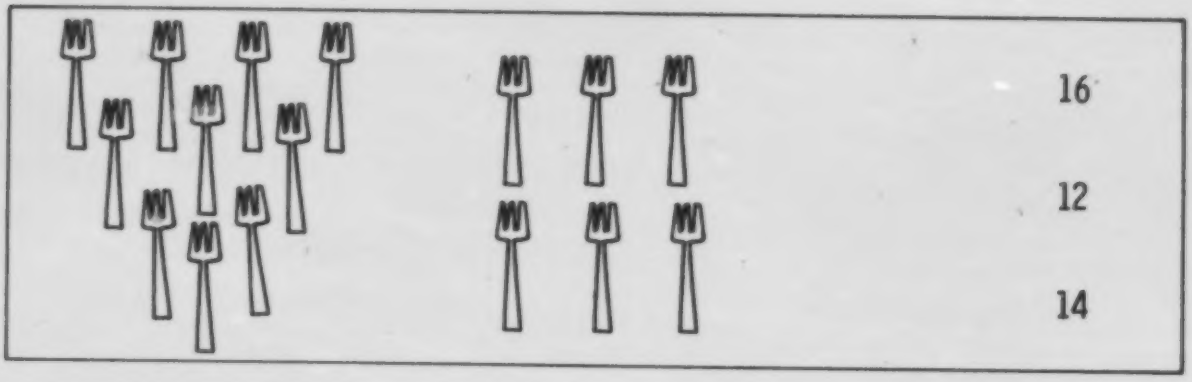


18

19

15

How many?



16

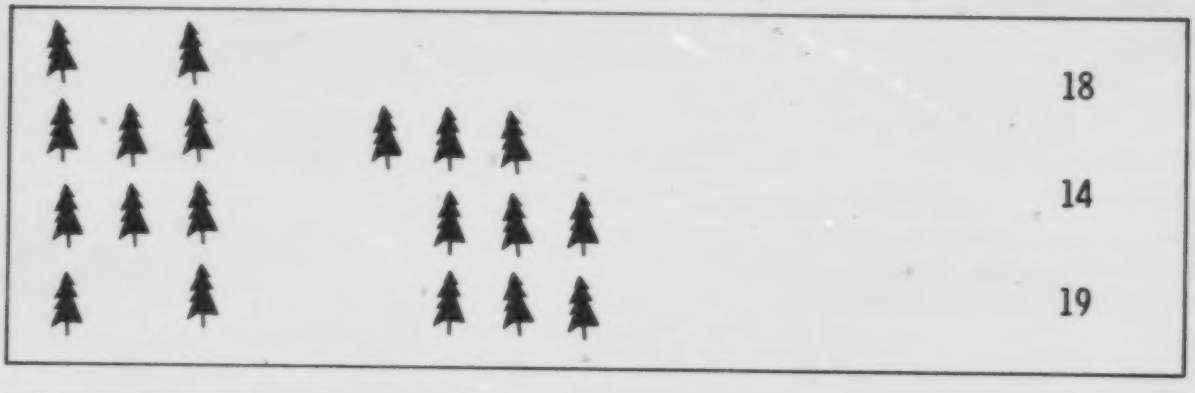
12

14

12

15

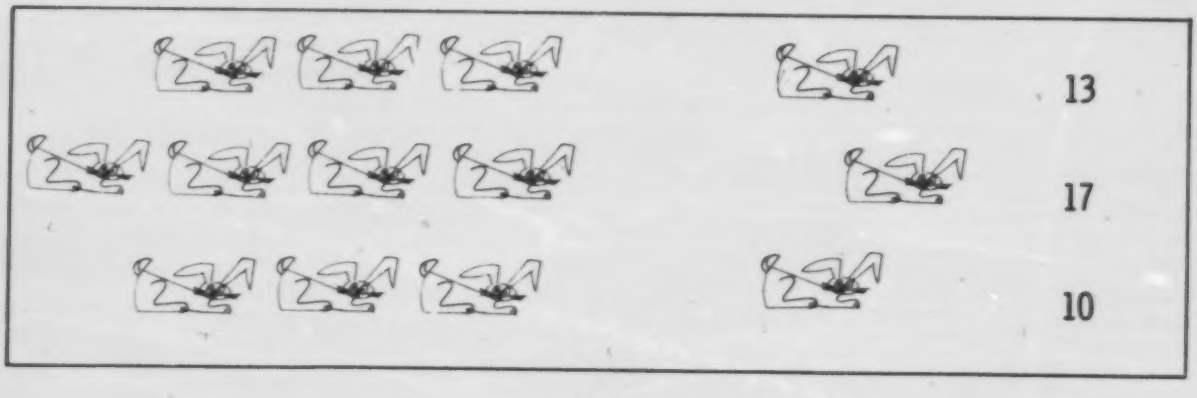
17



18

14

19



13

17

10

155

Two Names For A Number

Write another name.

Tens	Ones	
2	7	is

Tens	Ones	
4	7	is

Tens	Ones	
3	0	is

Tens	Ones	
5	6	is

Tens	Ones	
9	6	is

Tens	Ones	
8	3	is

Tens	Ones	
2	9	is

How many?

XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX	0000000000 0000000000 0000000000 0000000000 0000000
FFFFFFFFFF FFFFFFFFFF FFFFFFFFFF FFFFFFFFFF FFFFFFFFFF FF	PPPPPPPPPP PPPPPPPPPP PPPPPPPPPP PPPPPPPPPP PPPPPPPPPP
* *	ttttttttttt tttttttt
++++++++++ ++++++++++ +	&&&&&&&&&& &&&&&&&&&& &&&&&&&&&& &&&&&&&&&& &&&&&&&&

Which is greater?

10 20	30 20	30 40
90 80	60 70	50 40
10 50	90 20	30 60
70 50	60 20	50 70

Which is greater?

40	10	(50)	(70)	20

70	80	20	90	30

20	40	10	60	70

50	70	30	90	60

30	10	50	80	40

80	20	90	30	10

Which is less?

80 (70)	20 30	60 50
40 30	10 20	60 70
90 10	60 80	20 40
50 20	20 90	60 80

Which is less?

40	50	30	80	20

70	60	90	40	50

50	70	20	40	80

90	40	60	10	30

60	30	80	40	70

20	60	90	70	10

Teaching Page

Name the number.

10 greater than

10 is 20 50 is _____

30 is _____ 80 is _____

60 is _____ 20 is _____

10 less than

20 is _____ 90 is _____

40 is _____ 50 is _____

70 is _____ 30 is _____

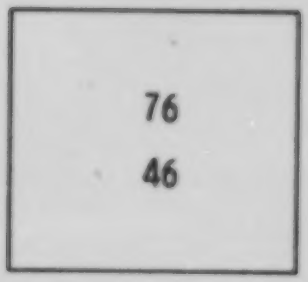
Which is greater?

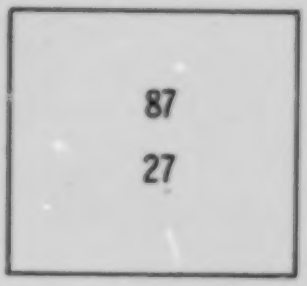
65 25	23 43	72 82
42 22	87 97	56 26
55 95	66 36	49 69
29 49	99 79	43 33

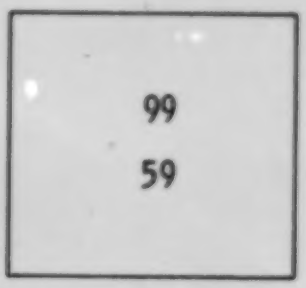
Which is greater?

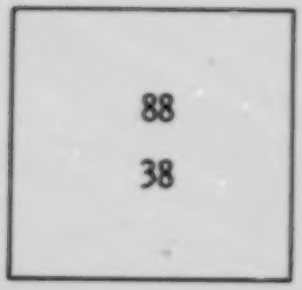
33	83	53	73	43
75	85	45	95	65
42	22	52	72	32
81	61	91	51	21
67	47	97	37	87
98	28	88	48	78

Which is less?









Which is less?

36	46	(26)	76	(16)
49	89	59	39	29
63	23	73	53	93
72	82	52	22	42
95	85	35	65	25
66	76	36	96	26

Which is greater?

21 (24)	34 36	59 53
47 45	62 65	77 74
29 26	83 89	35 38
91 95	38 36	68 64

Which is greater?

23	27	25	20	22

45	42	47	44	49

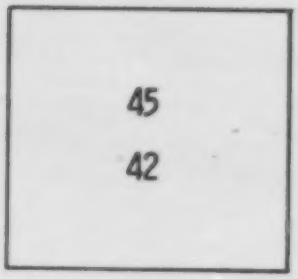
76	71	77	75	74

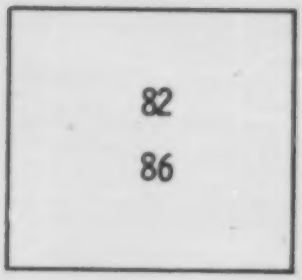
32	39	36	33	31

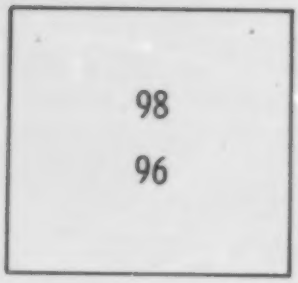
87	82	88	83	89

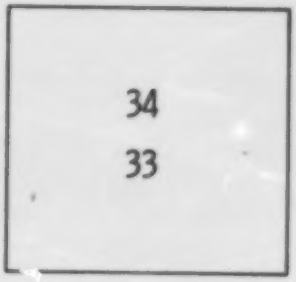
54	59	53	57	51

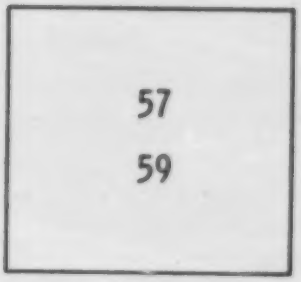
Which is less?

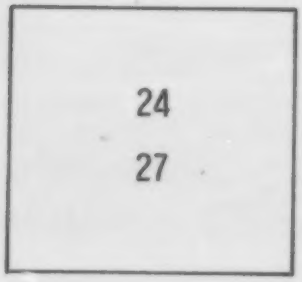


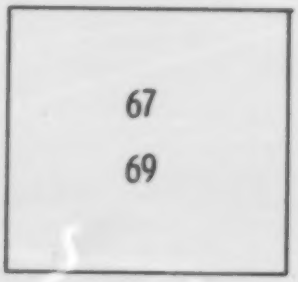


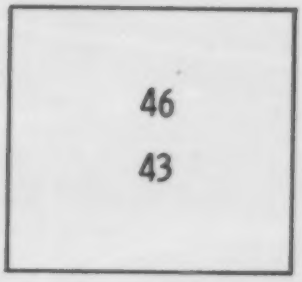


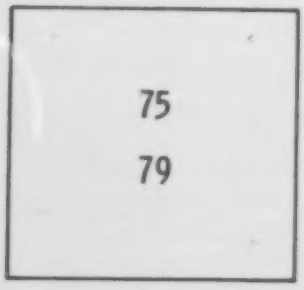


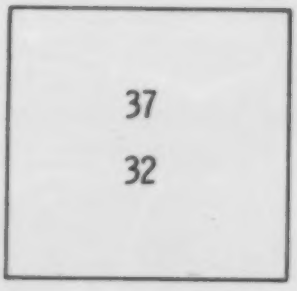


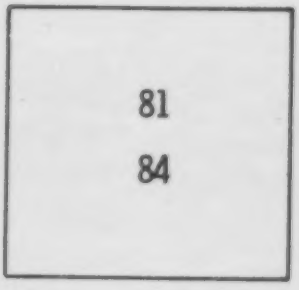












Which is less?

33	38	(32)	35	(31)

65	62	68	64	66

88	81	89	83	87

57	58	52	56	53

23	29	25	21	24

49	43	45	47	42

Which is greater?

(36)	27	17	24	30	13
79	(81)	77	96	65	32
21	19	91	58	28	23
10	6	45	50	88	95
53	97	61	59	56	49

Which is less?

21 (19)	95 88	27 36
91 58	97 53	79 81
28 23	61 59	17 13
10 6	56 49	30 13
45 50	32 61	65 32

Name the number.

1 greater than

23 is	24	76 is	
45 is		98 is	
32 is		67 is	
54 is		81 is	

1 less than

42 is 41

64 is _____

25 is _____

36 is _____

87 is _____

92 is _____

53 is _____

78 is _____

Which is greater?

15 (51)	61 16	13 31
21 12	36 63	71 17
65 56	81 18	39 93
14 41	76 67	19 91

Which is less?

17 71	91 19	12 21
54 45	15 51	36 63
31 13	61 16	14 41
69 96	71 17	18 81

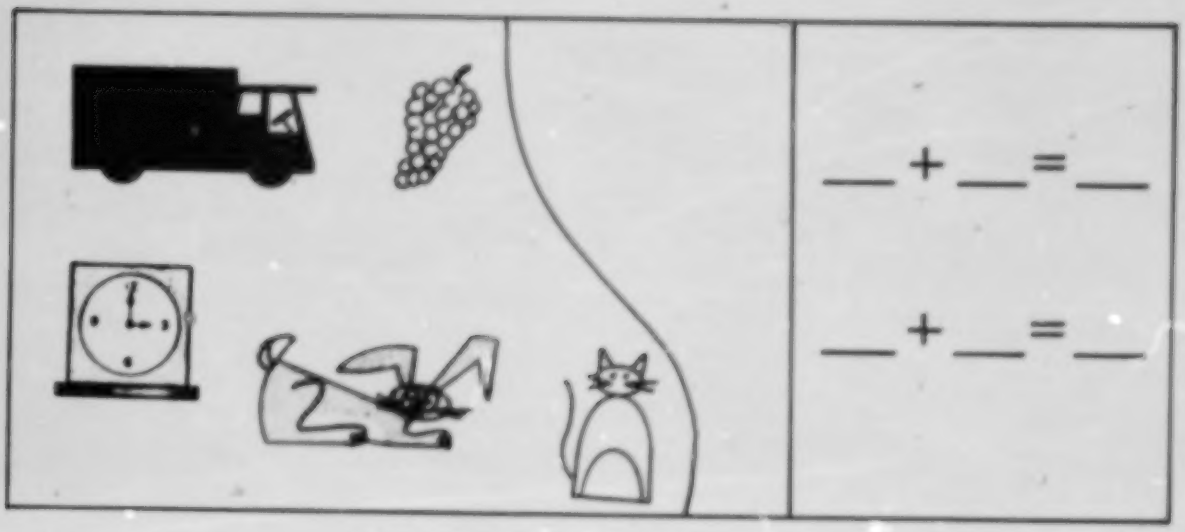
176

Order of Numbers

Write in Order from the Least to the Greatest

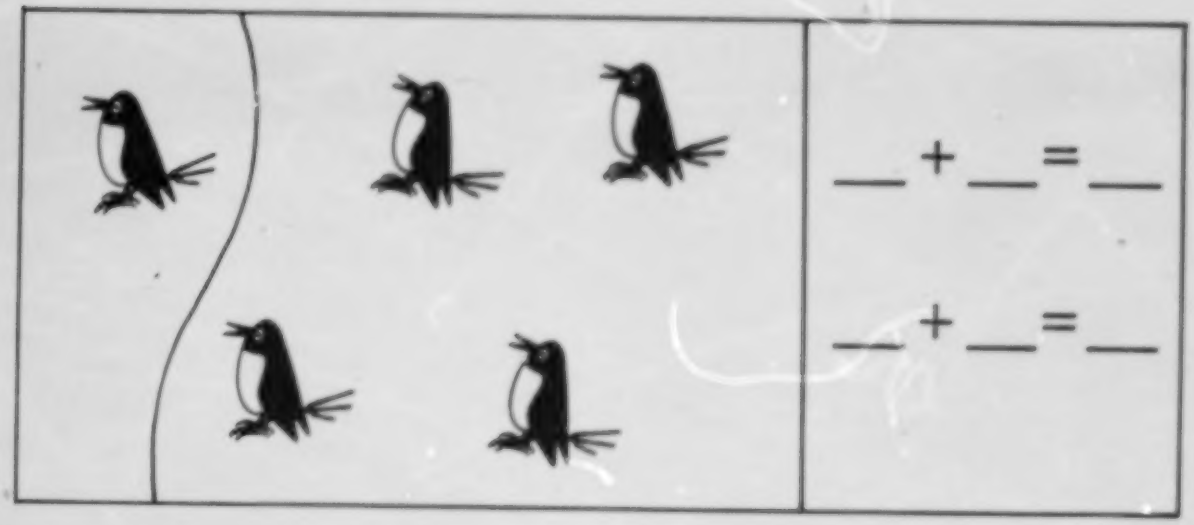
19 31 25	94 23 54
19 25 31	
86 45 29	23 12 18
56 84 99	53 36 16
63 48 72	15 34 83

Partitions



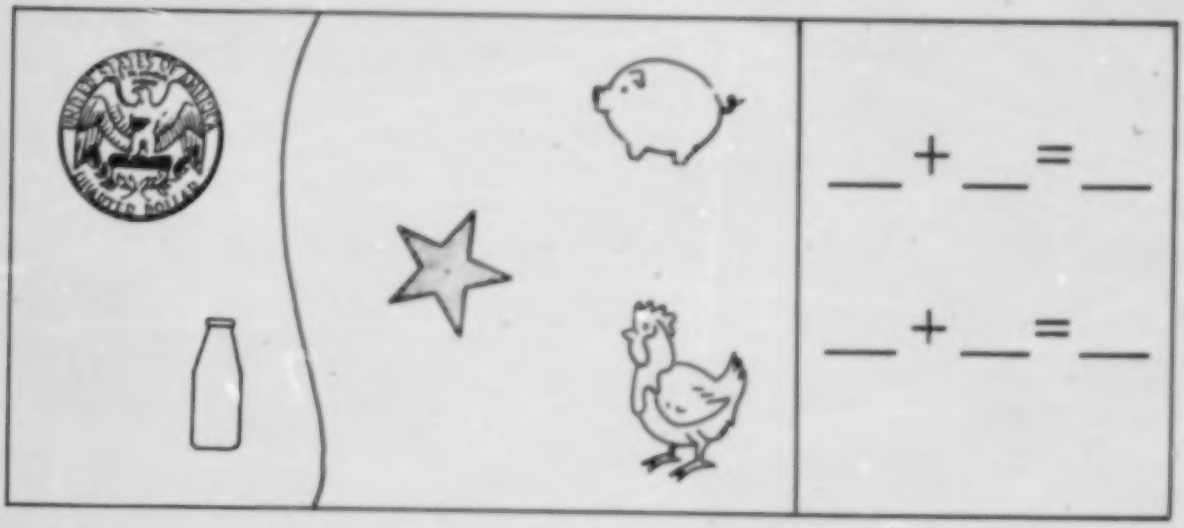
___ + ___ = ___

___ + ___ = ___



___ + ___ = ___

___ + ___ = ___



___ + ___ = ___

___ + ___ = ___

Partitions

___ + ___ = ___

___ + ___ = ___

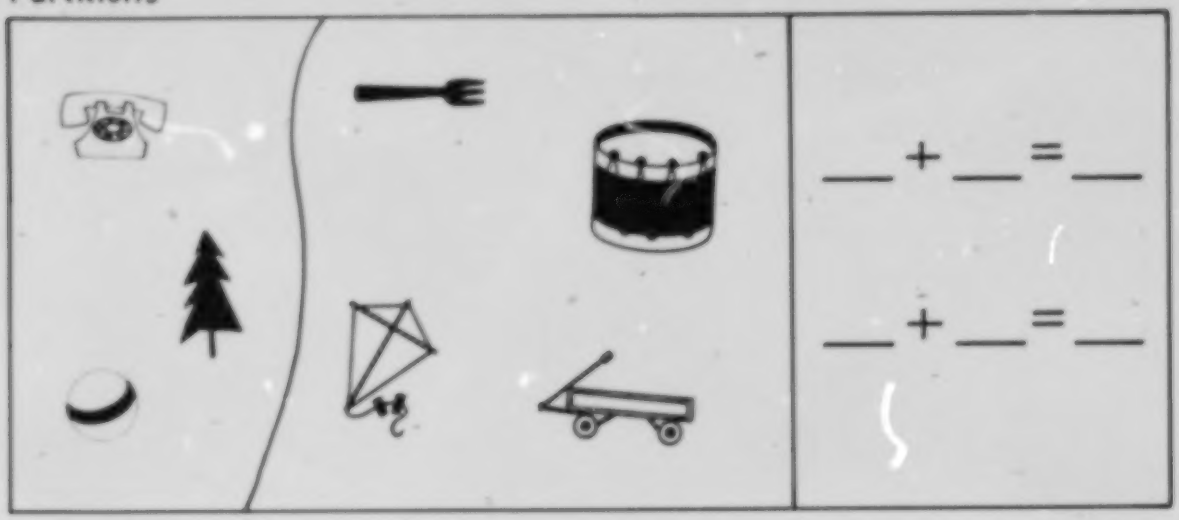
___ + ___ = ___

___ + ___ = ___

___ + ___ = ___

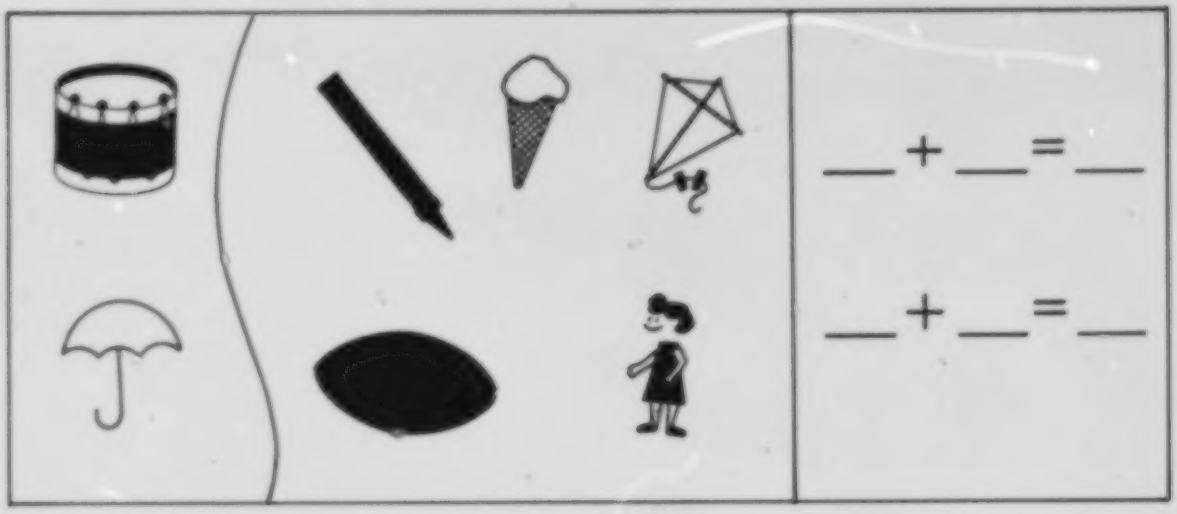
___ + ___ = ___

Partitions



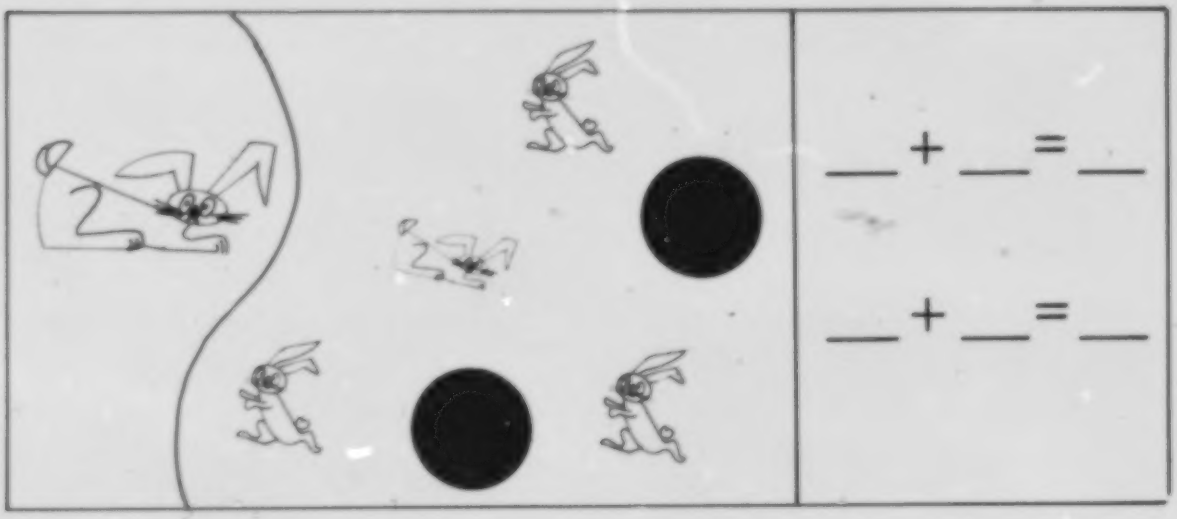
___ + ___ = ___

___ + ___ = ___



___ + ___ = ___

___ + ___ = ___



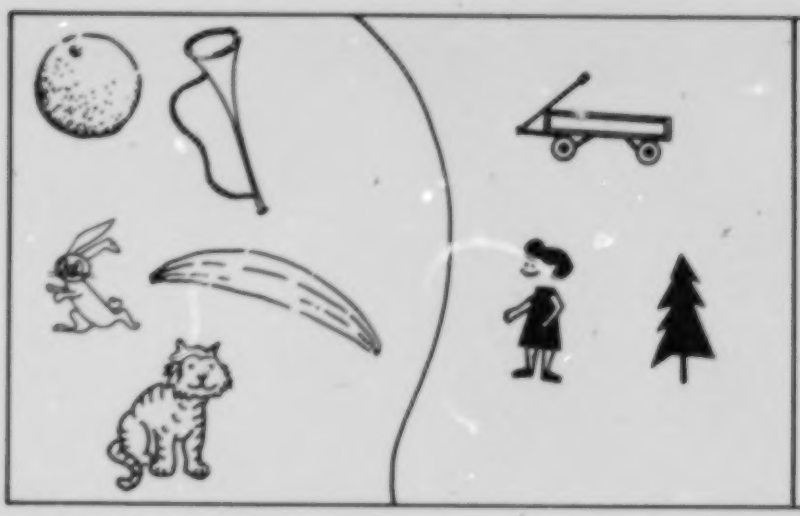
___ + ___ = ___

___ + ___ = ___

Partitions

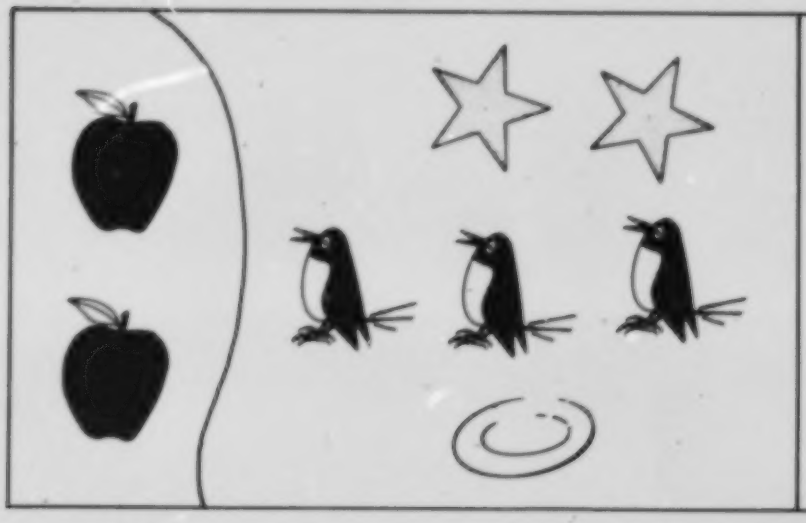
___ + ___ = ___

___ + ___ = ___



___ + ___ = ___

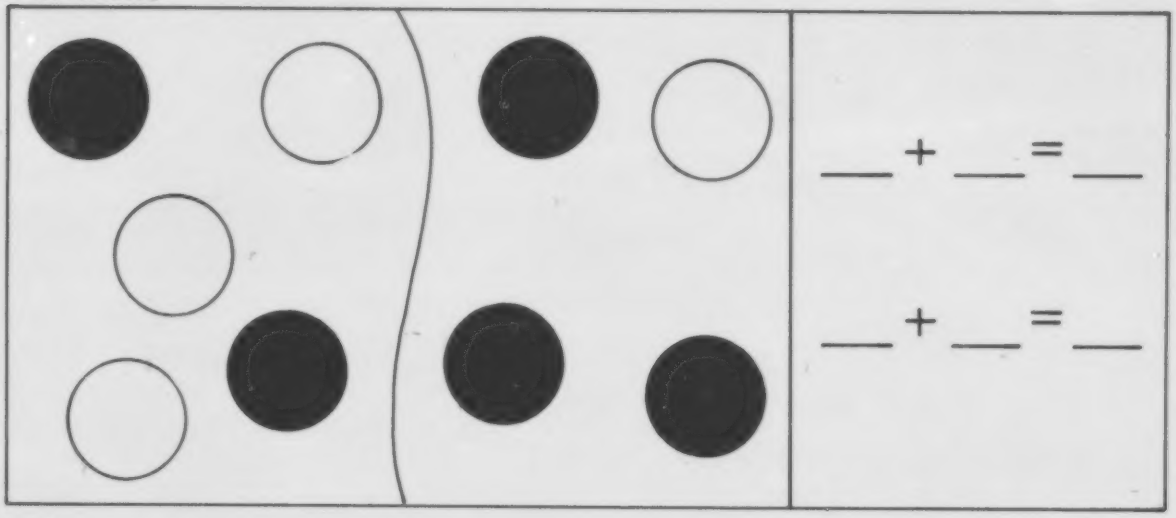
___ + ___ = ___



___ + ___ = ___

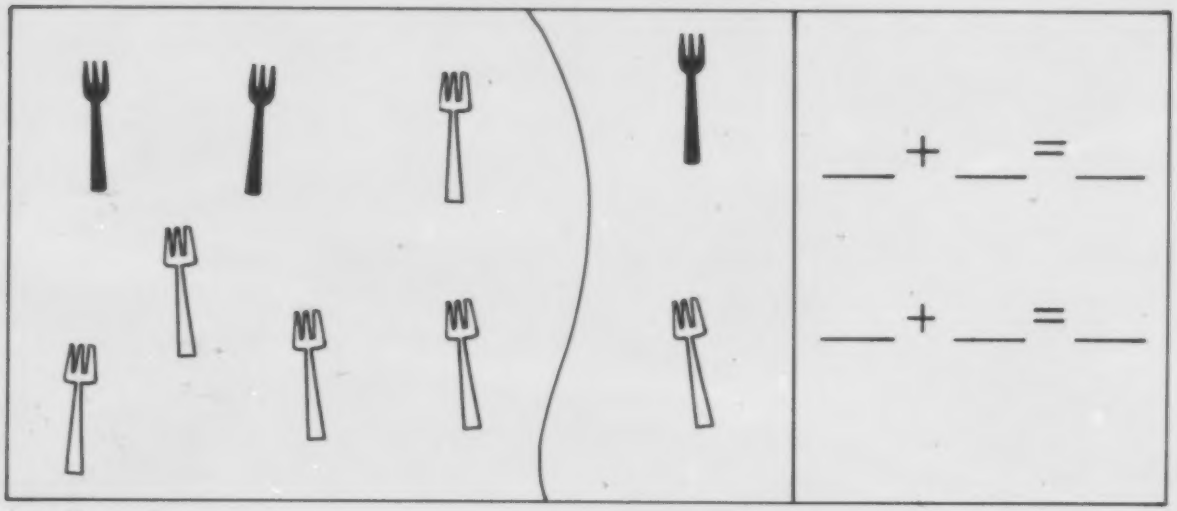
___ + ___ = ___

Partitions



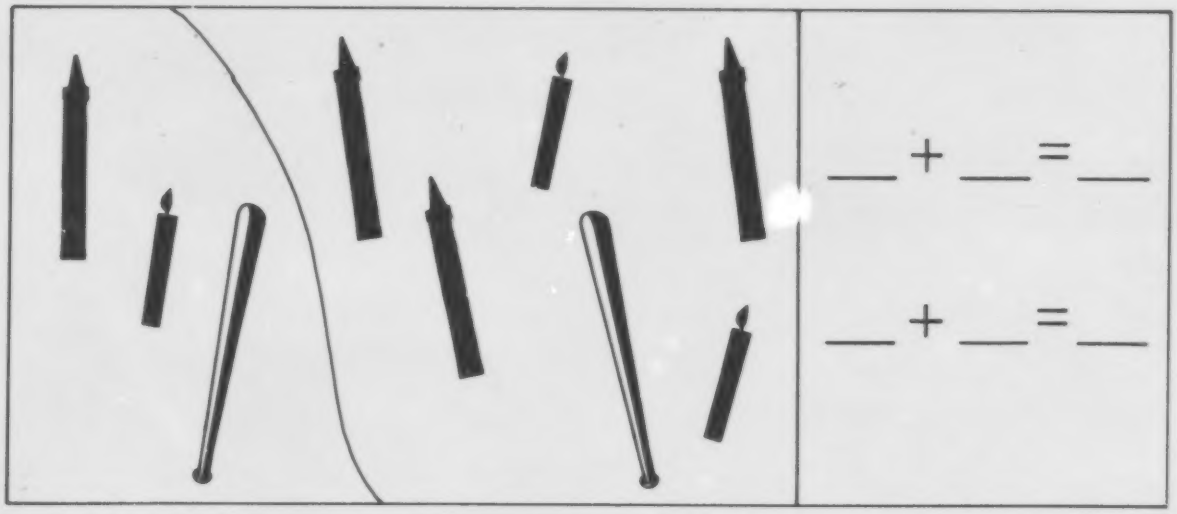
___ + ___ = ___

___ + ___ = ___



___ + ___ = ___

___ + ___ = ___



___ + ___ = ___

___ + ___ = ___

COMPLETE THE EQUATIONS

$5 = 4 + \square$

$5 = \square + 4$

$6 = 6 + \square$

$6 = \square + 6$

$5 = 2 + \square$

$5 = \square + 2$

$5 = 4 + \square$

$6 = \square + 2$

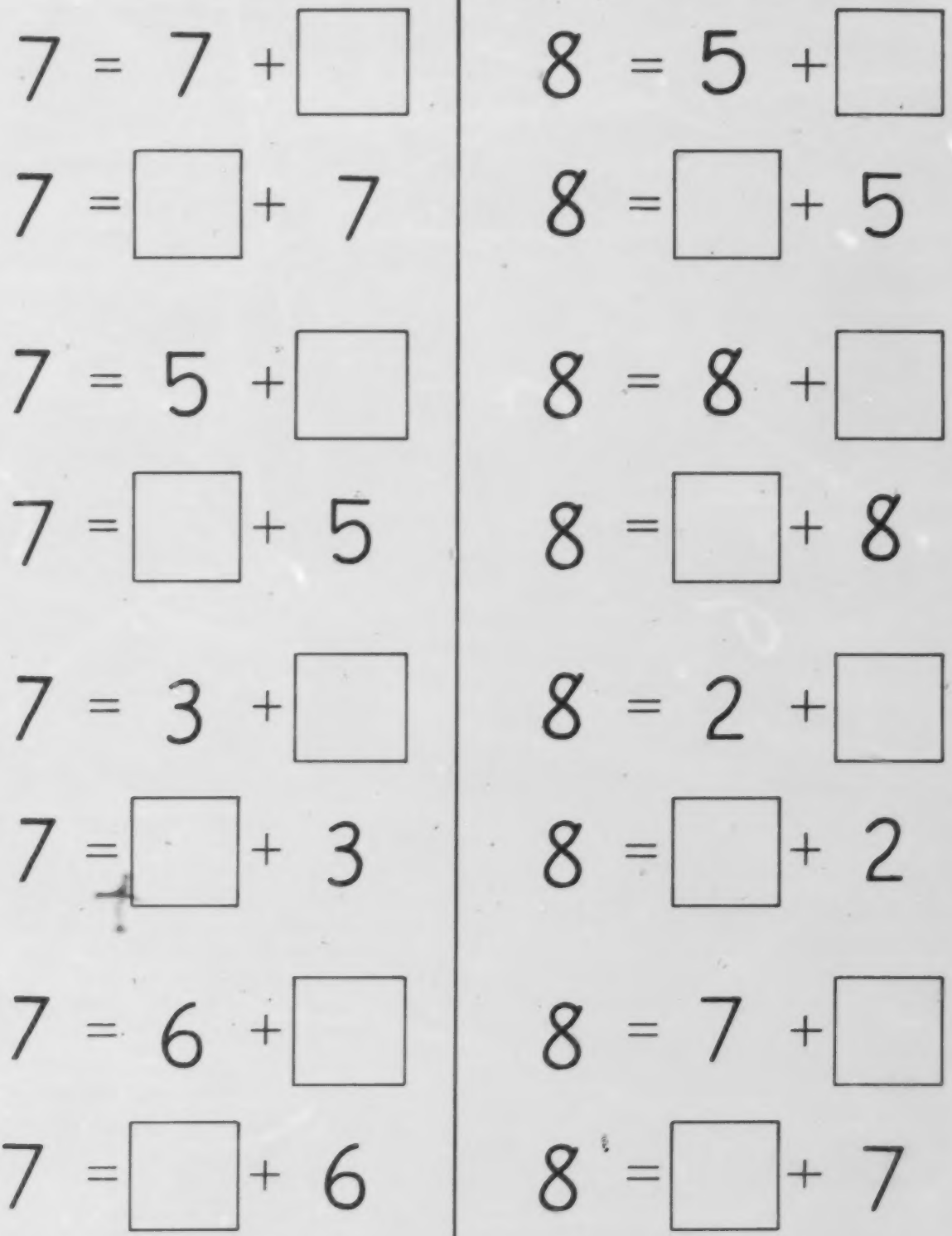
$5 = 5 + \square$

$5 = \square + 5$

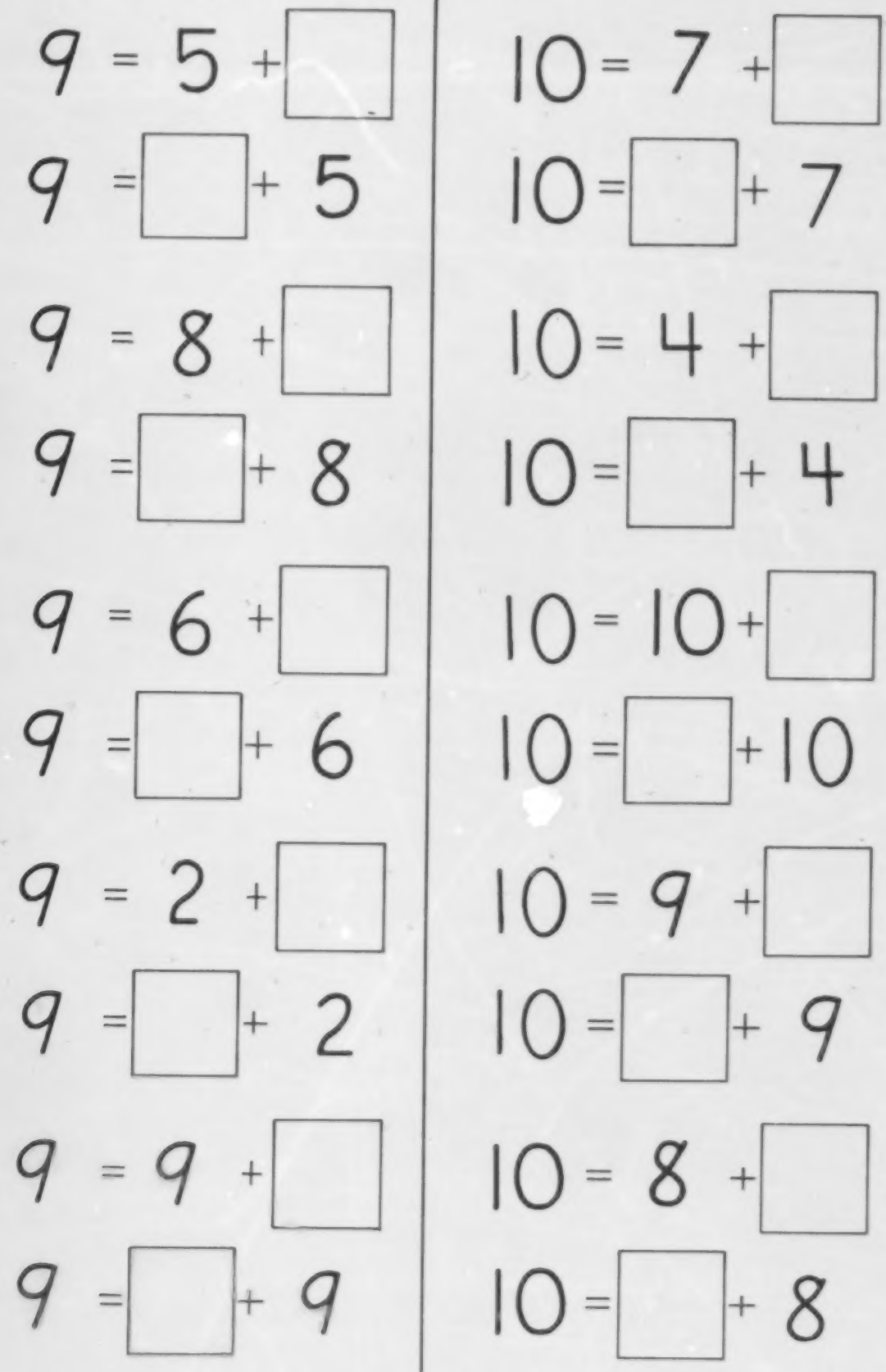
$6 = 1 + \square$

$6 = \square + 1$

COMPLETE THE EQUATIONS



COMPLETE THE EQUATIONS



Complete the equations.

5 − ___ = ___

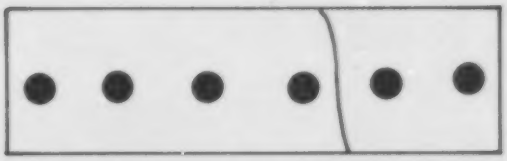
5 − ___ = ___

6 − ___ = ___

6 − ___ = ___

5 − ___ = ___

5 − ___ = ___



6 − ___ = ___

6 − ___ = ___

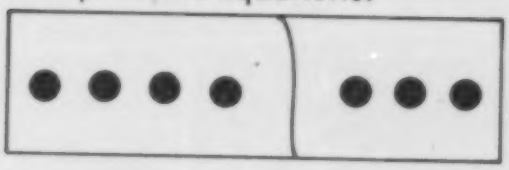
5 − ___ = ___

5 − ___ = ___

6 − ___ = ___

6 − ___ = ___

Complete the equations.



7 − ___ = ___

7 − ___ = ___

8 − ___ = ___

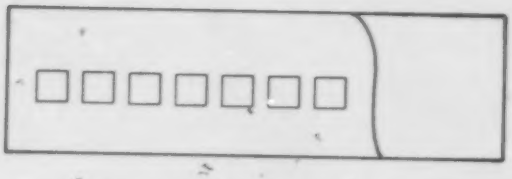
8 − ___ = ___

7 − ___ = ___

7 − ___ = ___

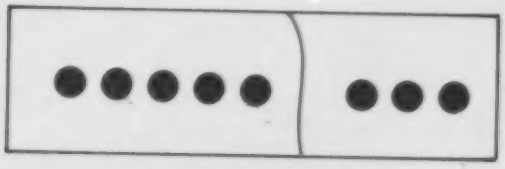
8 − ___ = ___

8 − ___ = ___



7 − ___ = ___

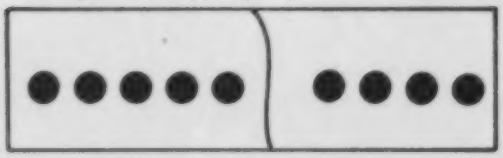
7 − ___ = ___



8 − ___ = ___

8 − ___ = ___

Complete the equations.



9 − ___ = ___

9 − ___ = ___

9 − ___ = ___

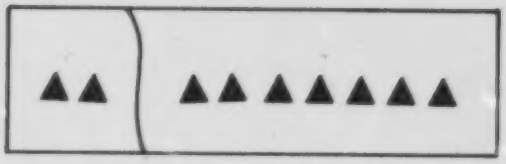
9 − ___ = ___

9 − ___ = ___

9 − ___ = ___

9 − ___ = ___

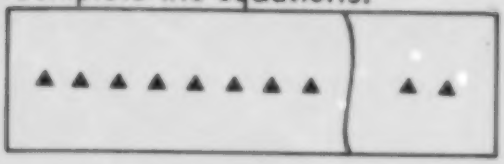
9 − ___ = ___



9 − ___ = ___

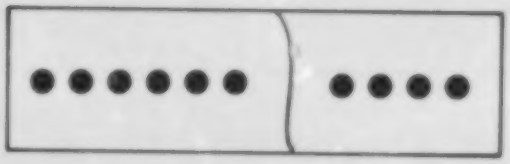
9 − ___ = ___

Complete the equations.



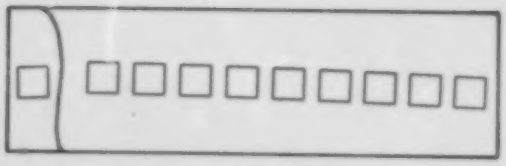
10 − ___ = ___

10 − ___ = ___



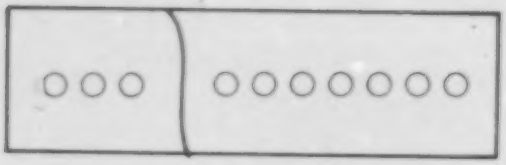
10 − ___ = ___

10 − ___ = ___



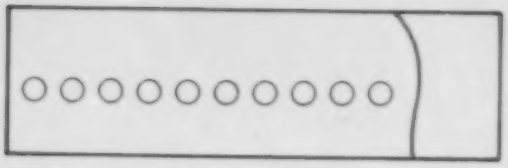
10 − ___ = ___

10 − ___ = ___



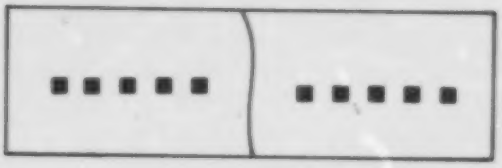
10 − ___ = ___

10 − ___ = ___



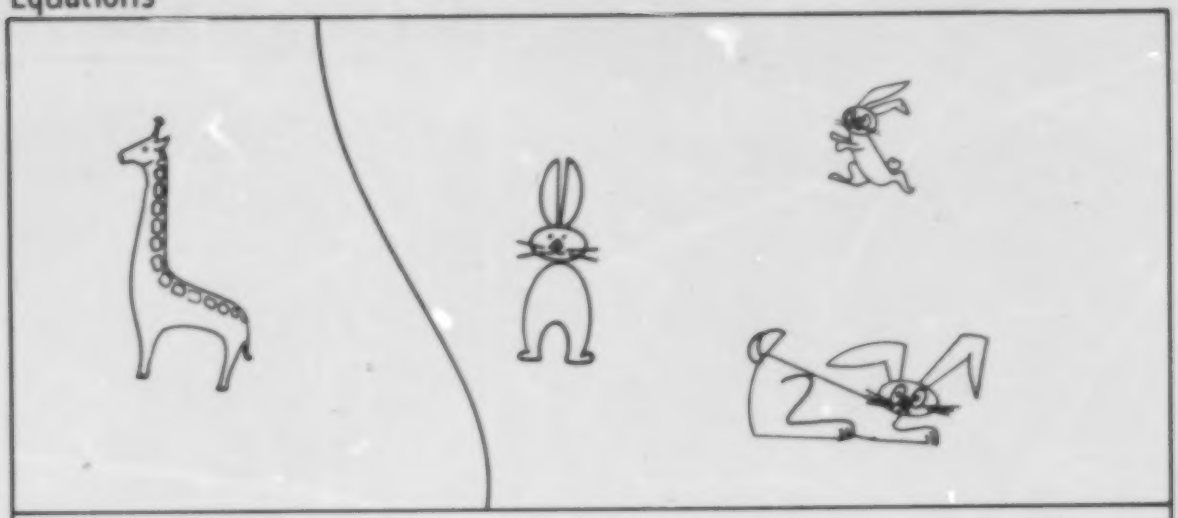
10 − ___ = ___

10 − ___ = ___



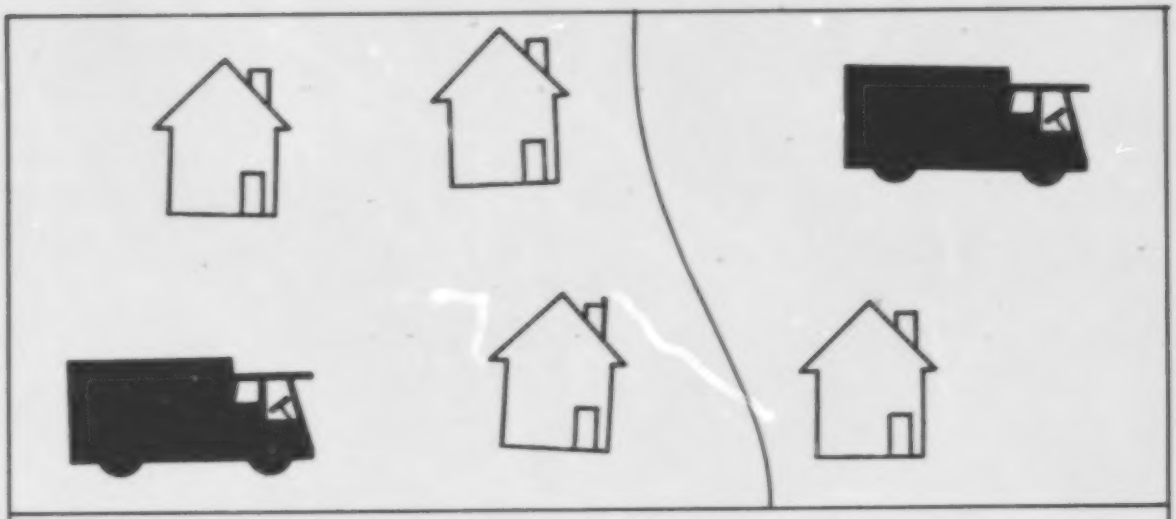
10 − ___ = ___

Equations



____ + ____ = ____ ____ − ____ = ____

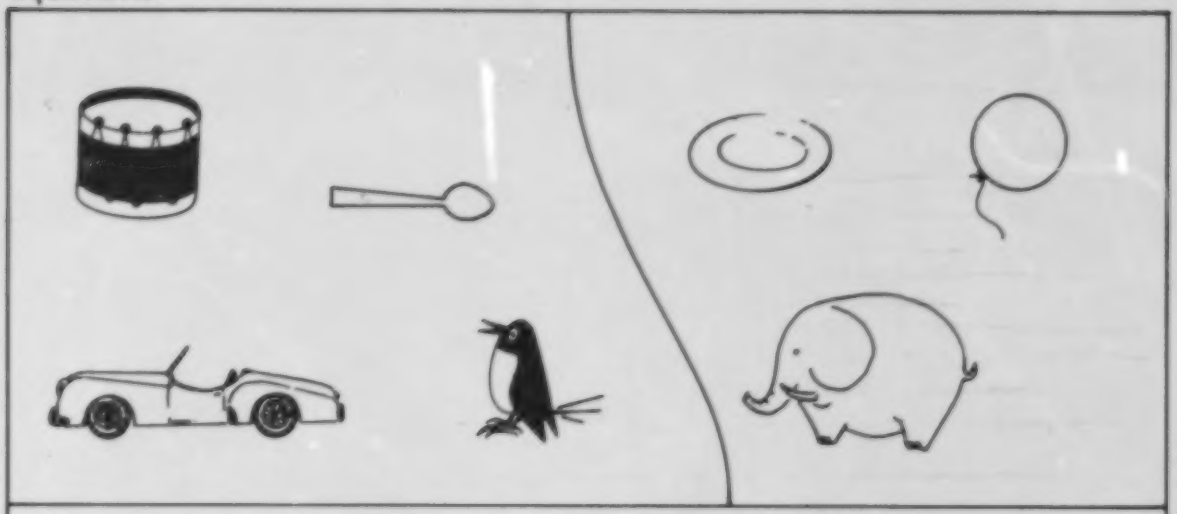
____ + ____ = ____ ____ − ____ = ____



____ + ____ = ____ ____ − ____ = ____

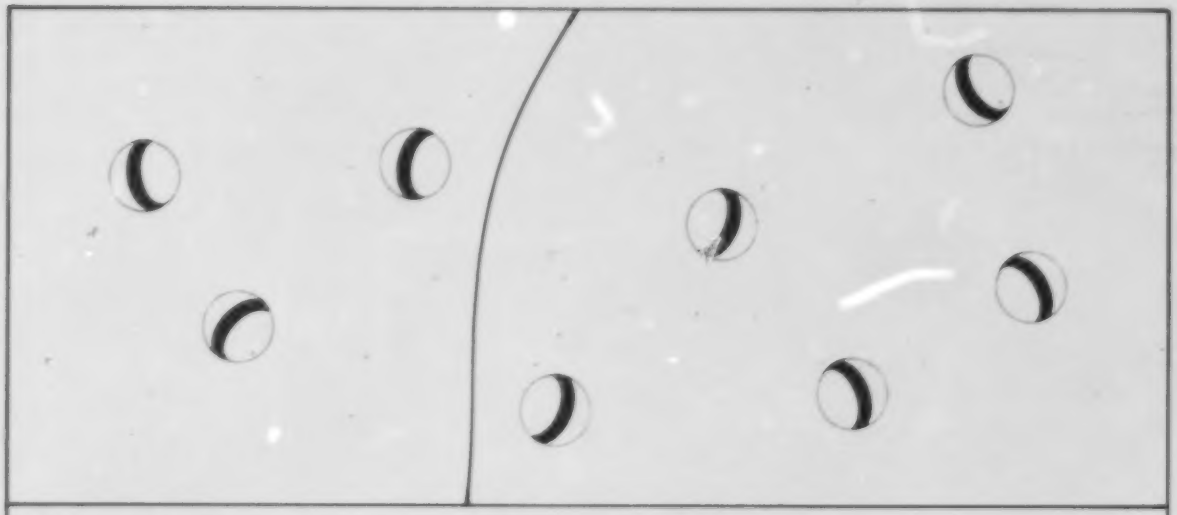
____ + ____ = ____ ____ − ____ = ____

Equations



____ + ____ = ____ ____ − ____ = ____

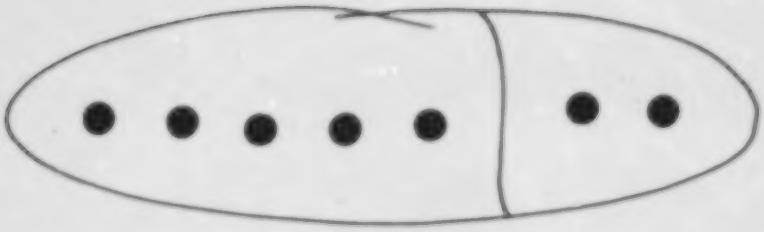
____ + ____ = ____ ____ − ____ = ____



____ + ____ = ____ ____ − ____ = ____

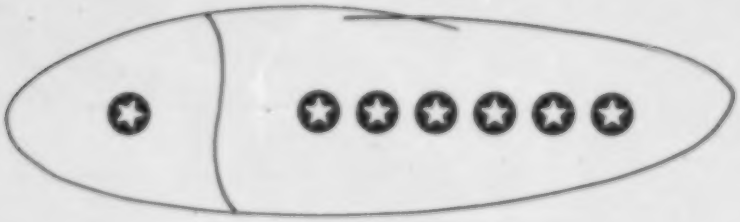
____ + ____ = ____ ____ − ____ = ____

Equations



___ + ___ = ___ ___ - ___ = ___

___ + ___ = ___ ___ - ___ = ___



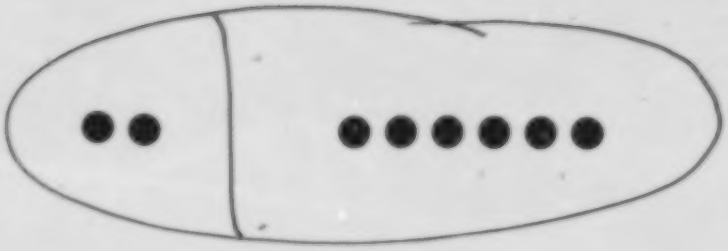
___ + ___ = ___ ___ - ___ = ___

___ + ___ = ___ ___ - ___ = ___

___ + ___ = ___ ___ - ___ = ___

___ + ___ = ___ ___ - ___ = ___

Equations



___ + ___ = ___ ___ - ___ = ___

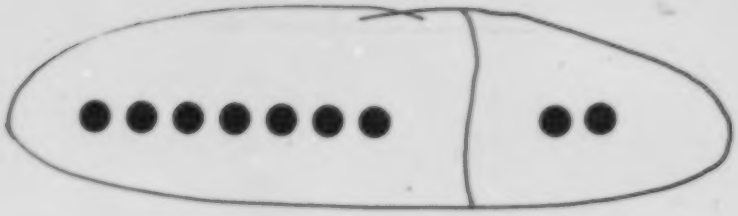
___ + ___ = ___ ___ - ___ = ___

___ + ___ = ___ ___ - ___ = ___

___ + ___ = ___ ___ - ___ = ___

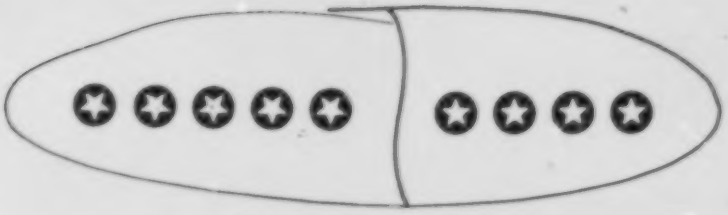
___ + ___ = ___ ___ - ___ = ___

___ + ___ = ___ ___ - ___ = ___



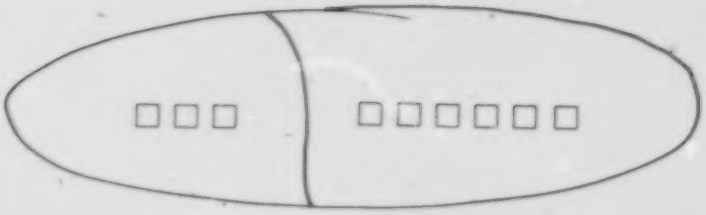
___ + ___ = ___ ___ - ___ = ___

___ + ___ = ___ ___ - ___ = ___



___ + ___ = ___ ___ - ___ = ___

___ + ___ = ___ ___ - ___ = ___



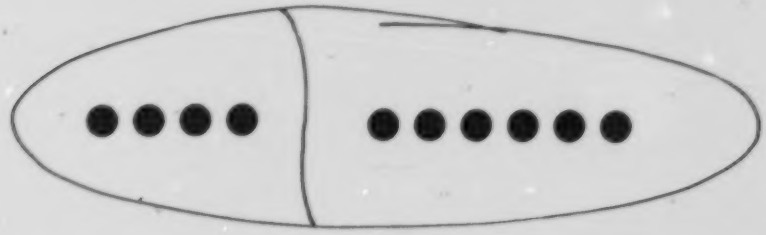
___ + ___ = ___ ___ - ___ = ___

___ + ___ = ___ ___ - ___ = ___

Equations

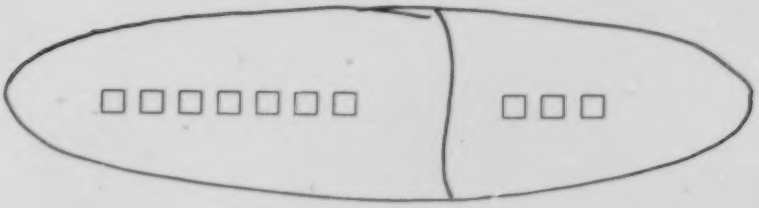
___ + ___ = ___ ___ - ___ = ___

___ + ___ = ___ ___ - ___ = ___



___ + ___ = ___ ___ - ___ = ___

___ + ___ = ___ ___ - ___ = ___



___ + ___ = ___ ___ - ___ = ___

___ + ___ = ___ ___ - ___ = ___

Which are equal to 7?

3 + 4

4 + 4

8 + 1

2 + 7

5 + 3

6 + 1

9 + 0

1 + 8

2 + 5

Which are equal to 8?

7 + 1

5 + 2

6 + 2

3 + 5

4 + 3

5 + 4

1 + 6

4 + 4

8 + 0

Which are equal to 9?

$8 + 1$

$8 + 2$

$5 + 4$

$2 + 6$

$3 + 6$

$10 + 10$

$1 + 8$

$7 + 2$

$9 + 0$

Which are equal to 10?

$6 + 2$

$5 + 5$

$4 + 5$

$2 + 8$

$3 + 4$

$3 + 7$

$0 + 9$

$4 + 6$

$1 + 9$

Which are equal to 5?

6 − 1

9 − 3

8 − 3

4 − 2

10 − 8

9 − 4

6 − 2

5 − 0

8 − 1

Which are equal to 6?

7 − 2

10 − 4

9 − 1

6 − 4

8 − 2

5 − 4

7 − 1

10 − 2

7 − 4

Which are equal to 7?

8 − 1

6 − 3

7 − 5

9 − 2

4 − 4

9 − 3

10 − 3

7 − 2

7 − 0

Which are equal to 8?

8 − 3

10 − 2

6 − 4

7 − 1

8 − 0

10 − 4

5 − 3

9 − 1

6 − 6

Which are equal to 9?

7 — 4

8 — 6

10 — 1

6 — 5

8 — 7

9 — 0

10 — 5

9 — 9

8 — 4

Which are equal to 10?

9 — 2

10 — 10

7 — 5

8 — 1

9 — 5

10 — 0

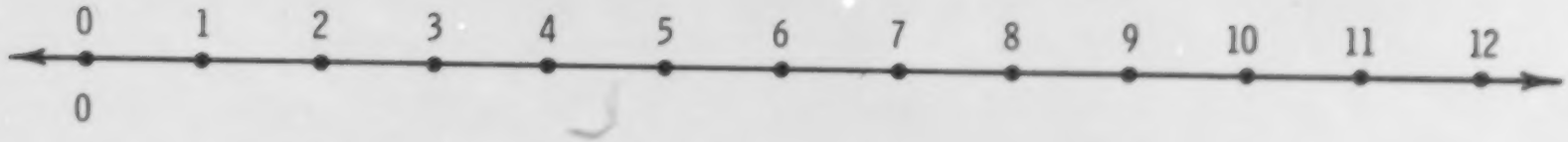
8 — 6

10 — 4

9 — 4

7 □	8 □	9 □
3 + 4	4 + 4	0 + 8
0 + 9	10 − 2	7 + 2
5 + 4	3 + 3	8 + 2
10 − 3	8 + 1	3 + 1
2 + 6	5 + 3	10 − 1
8 − 1	7 + 3	5 + 1
2 + 5	6 + 1	6 + 3
9 − 2	9 − 1	10 − 0

Fold until edge covers numerals, but not dots.



Complete the equations.

202

$2 + 1 = \square$

$5 + 1 = \square$

$1 + 5 = \square$

$1 + 2 = \square$

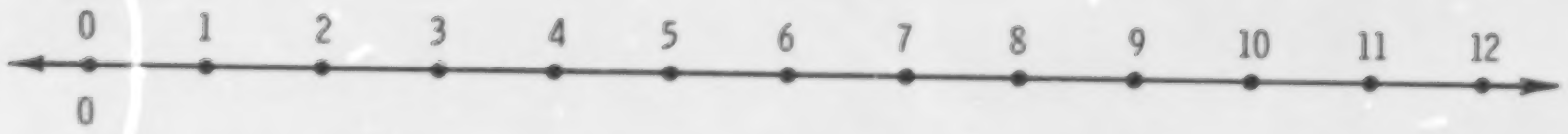
$5 + 3 = \square$

$2 + 4 = \square$

$1 + 6 = \square$

$3 + 4 = \square$

Fold until edge covers numerals, but not dots.



Complete the equations.

$3 + 2 = \square$

$4 + 5 = \square$

$4 + 2 = \square$

$2 + 5 = \square$

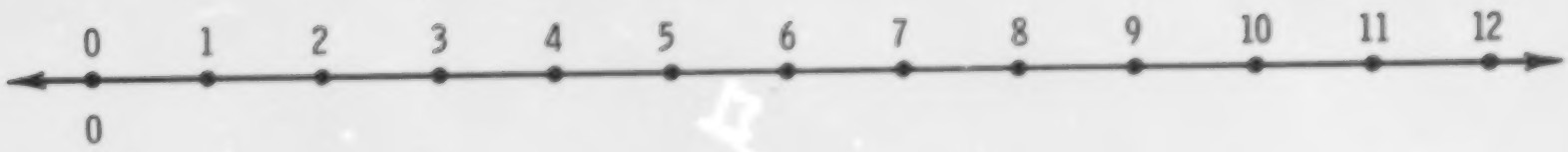
$1 + 7 = \square$

$6 + 2 = \square$

$3 + 5 = \square$

$4 + 3 = \square$

Fold until edge covers numerals, but not dots.



204

$5 - 3 = \square$

$8 - 5 = \square$

$7 - 2 = \square$

$8 - 2 = \square$

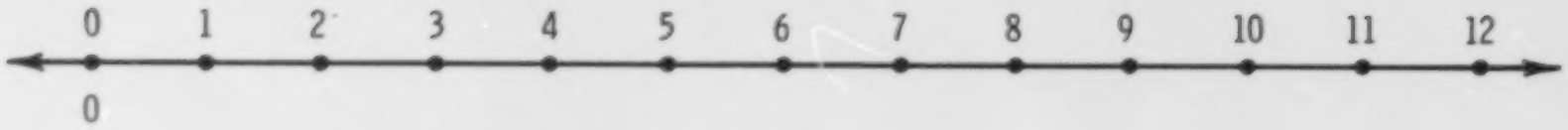
$9 - 7 = \square$

$6 - 1 = \square$

$5 - 2 = \square$

$8 - 2 = \square$

Fold until edge covers numerals, but not dots.



Complete the equations.

$8 - 1 = \square$

$3 + 6 = \square$

$10 - 3 = \square$

$7 - 6 = \square$

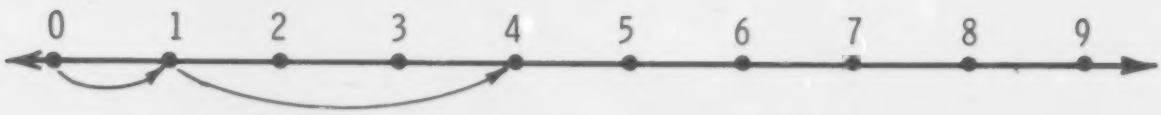
$2 + 7 = \square$

$9 - 5 = \square$

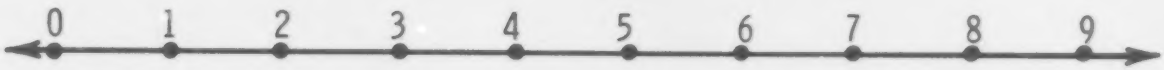
$1 + 4 = \square$

$2 + 6 = \square$

Use the number line to help you complete the equation.



$1 + 3 = \square$

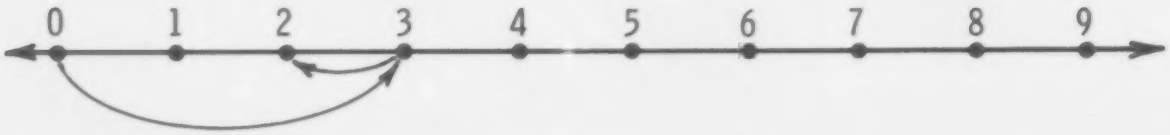


$2 + 1 = \square$

$8 + 1 = \square$

$4 + 5 = \square$

Use the number line to help you complete the equation.



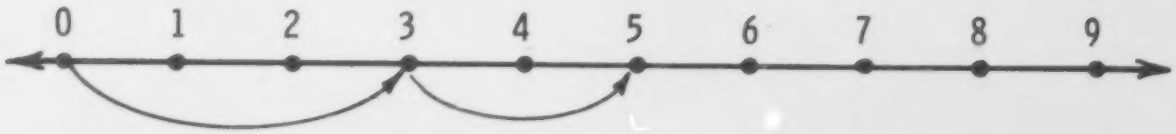
$3 - 1 = \square$

$5 - 2 = \square$

$9 - 1 = \square$

$6 - 5 = \square$

Use the number line to help you complete the equation.



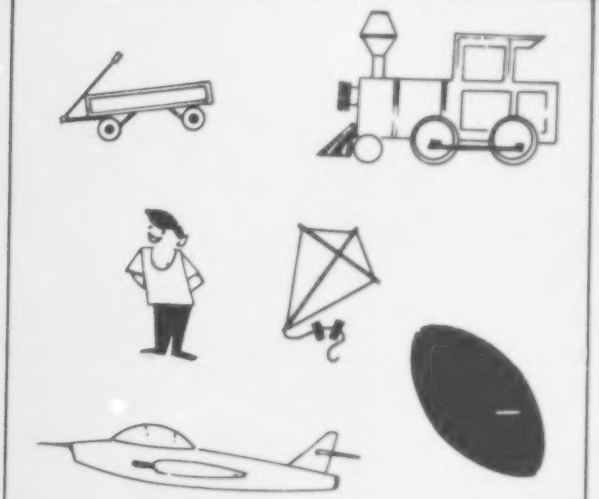
$3 + 2 = \square$

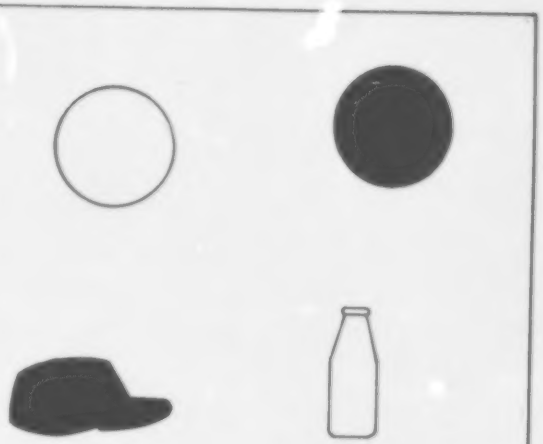
$9 - 7 = \square$

$4 - 3 = \square$

$6 + 1 = \square$

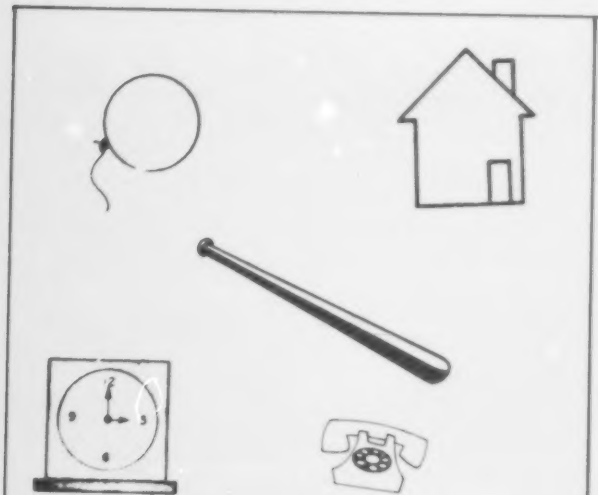
Comparing Sets





How many? _____ How many? _____

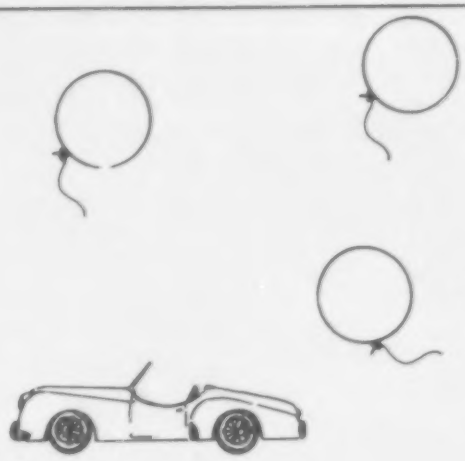
How many more? _____



How many? _____ How many? _____

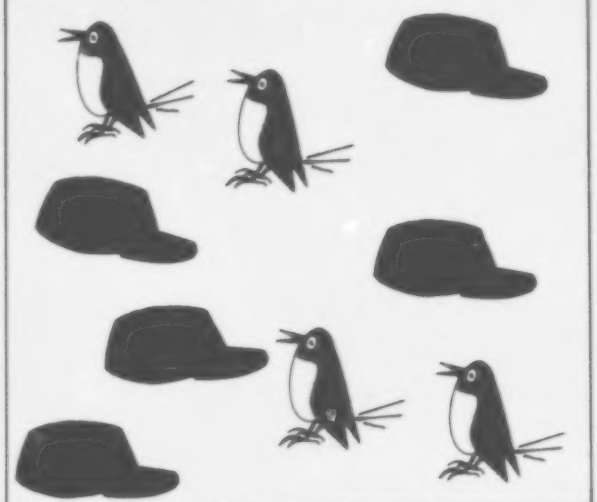
How many more? _____

Comparing Sets



How many? _____ How many? _____

How many more? _____

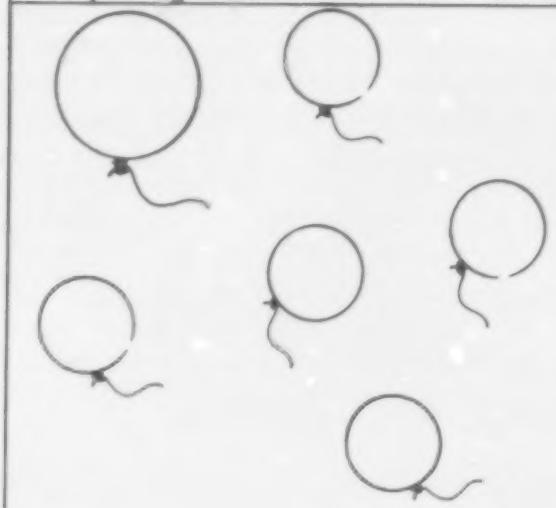


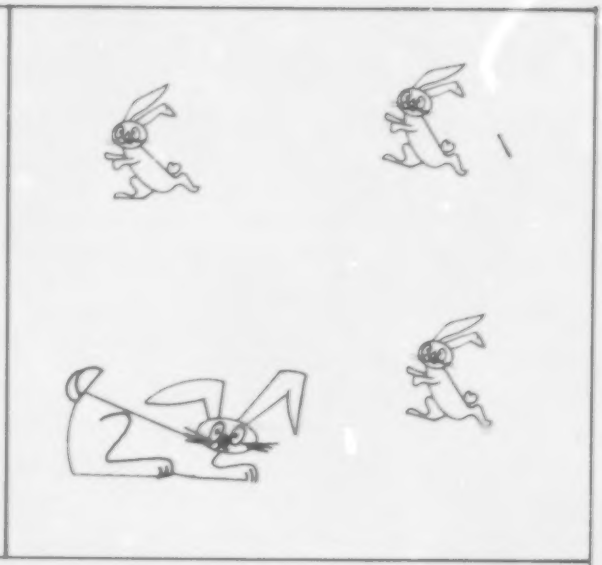
How many? _____ How many? _____

How many more? _____

87

Comparing Sets





How many? _____ How many? _____

How many more? _____

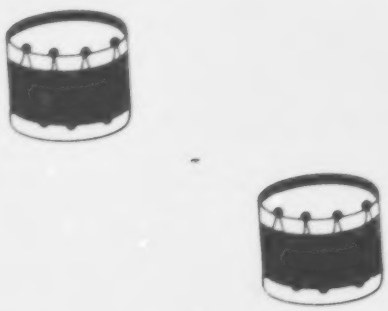
How many? _____ How many? _____

How many more? _____

Comparing Sets

How many? _____ How many? _____

How many more? _____



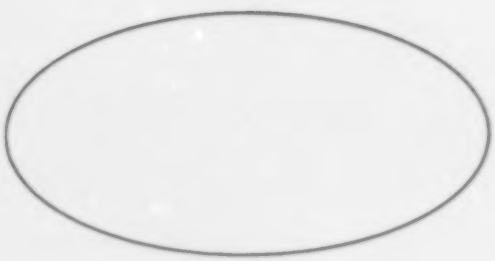
How many? _____ How many? _____

How many more? _____

Show the partition.

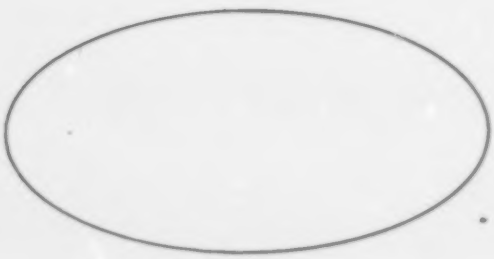
$7 - \square = 3$

$9 - \square = 6$



$5 - \square = 4$

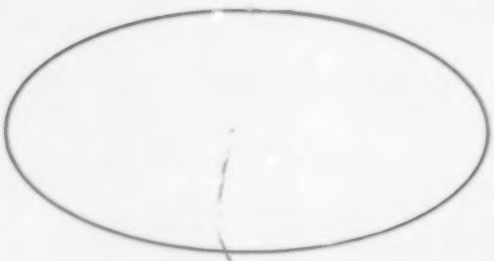
$8 - \square = 3$



$6 - \square = 2$

$10 - \square = 3$

Show the partition.



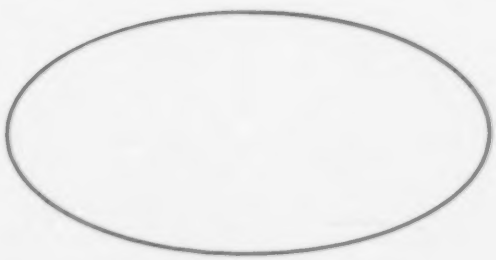
□ - 6 = 2

□ - 2 = 7

□ - 5 = 4

□ - 4 = 6

□ - 7 = 3



□ - 1 = 7

Complete the equations.

$\square + 5 = 7$

$8 - 5 = \square$

$10 - \square = 8$

$6 + \square = 8$

$7 - 0 = \square$

$\square - 3 = 6$

$1 + 9 = \square$

$6 + 2 = \square$

$0 + 8 = \square$

$4 - 1 = \square$

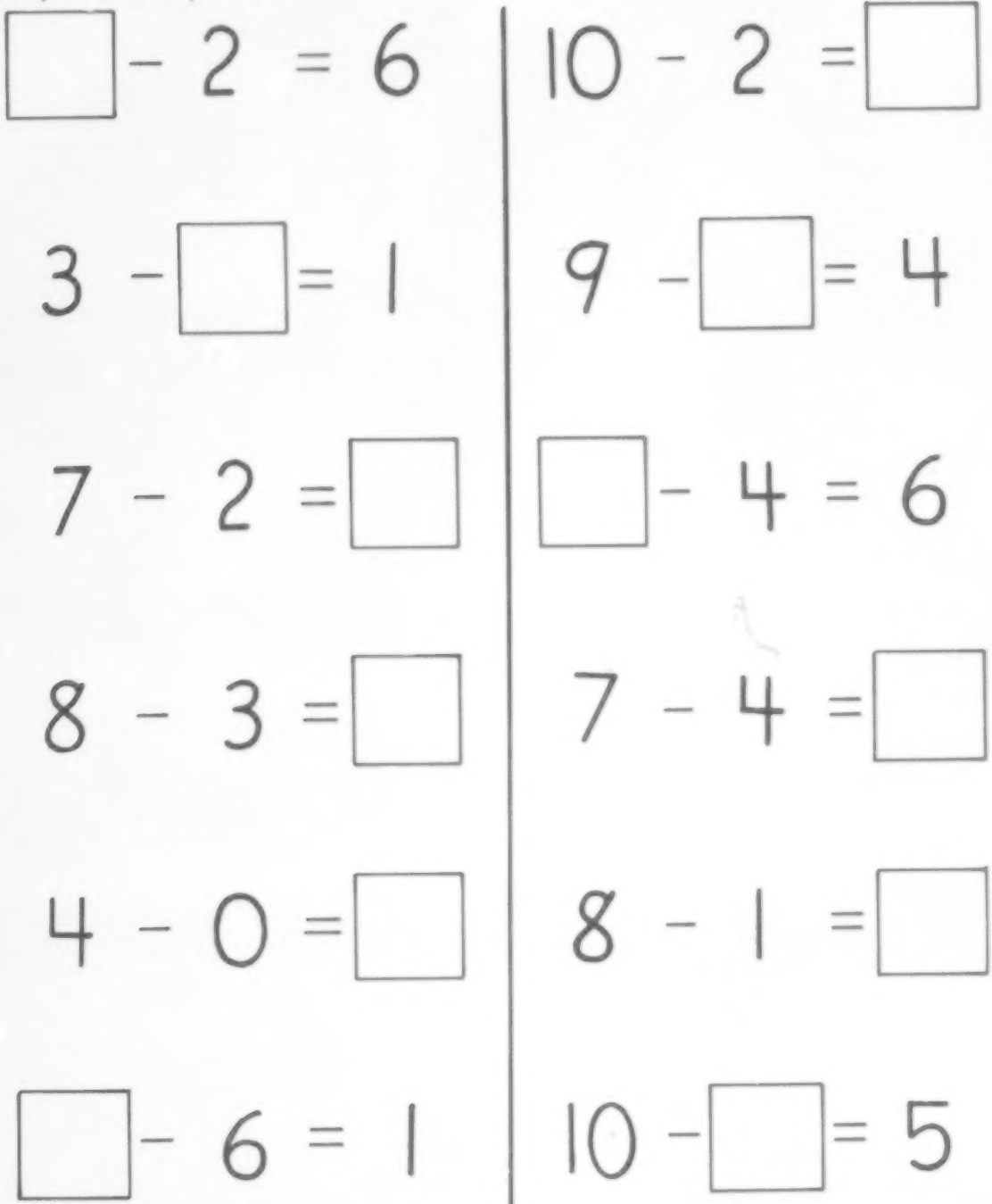
$\square - 1 = 3$

$5 - \square = 4$

$9 - \square = 6$

$0 + \square = 7$

Complete the equations.



Complete the equations.

$3 + \square = 7$

$4 + \square = 9$

$\square + 8 = 10$

$\square + 1 = 9$

$7 + 0 = \square$

$6 + \square = 8$

$\square + 4 = 6$

$0 + \square = 6$

$5 + 4 = \square$

$\square + 2 = 7$

$\square + 4 = 8$

$\square + 6 = 10$

$2 + \square = 9$

$7 + 3 = \square$

Equations

Write + or −

2 ⊕ 1 = 3	9 ◯ 9 = 0
5 ⊖ 3 = 2	3 ◯ 4 = 7
7 ◯ 1 = 6	1 ◯ 8 = 9
4 ◯ 4 = 8	6 ◯ 3 = 3
1 ◯ 9 = 10	5 ◯ 4 = 9
4 ◯ 3 = 1	7 ◯ 0 = 7
5 ◯ 2 = 7	3 ◯ 6 = 9
8 ◯ 5 = 3	6 ◯ 4 = 2
9 ◯ 8 = 1	1 ◯ 5 = 6

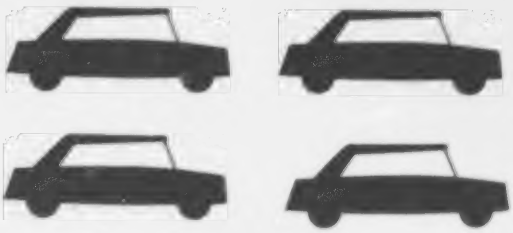
Solving Problems

1. Sam wants 6 toy cars.
   He has 4 toy cars.
   How many toy cars must he get?

   _____

   Sam must get _____ toy cars.

Problem Picture

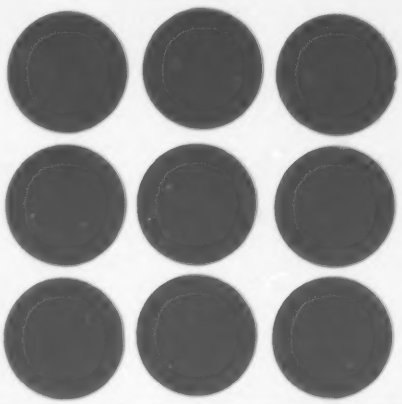


2. Pat had 9 marbles.
   He gave 5 marbles to Dick.
   How many marbles did Pat have then?

   _____

   Pat had _____ marbles then.

Problem Picture

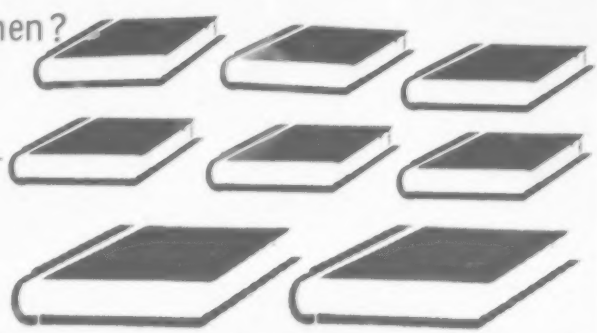


3. Nan had 6 books.
   She got 2 new books.
   How many books did Nan have then?

   _____

   Nan had _____ books then.

Problem Picture



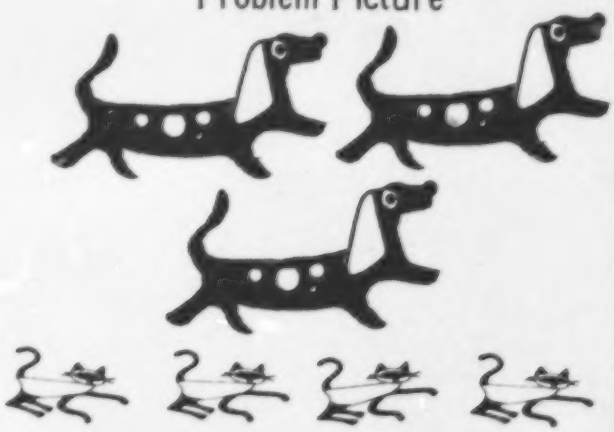
Solving Problems

1. Bob's dog had 3 puppies.
   His cat had 4 kittens.
   How many baby animals did Bob have?

   _____

   Bob had ____ baby animals.

Problem Picture



2. Mother needs 10 candles
   She has 6 candles.
   How many candles must she get?

   _____

   She must get _____ candles.

Problem Picture

3. Mary had 8 toys.
   Tom took 3 of the toys.
   How many toys does Mary have now?

   _____

   Mary has _____ toys now.

Problem Picture

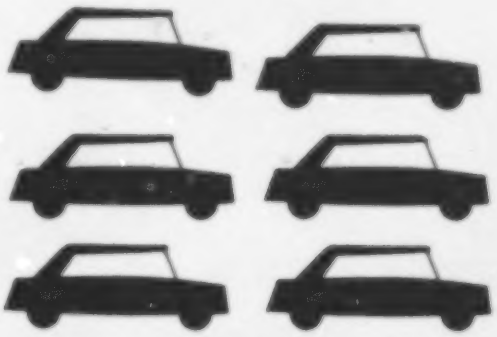
Solving Problems

1. David had 6 toy cars.
   He gave 1 car to Jim.
   How many cars does David have?

   _____

   David has _____ toy cars now.

Problem Picture



2. Sally has 2 crayons.
   She needs 6 crayons.
   How many crayons must she get?

   _____

   Sally must get _____ crayons.

Problem Picture

3. Joan had 2 cookies.
   Mother gave 2 more cookies to Joan.
   How many cookies did Joan have then?

   _____

   Joan had _____ cookies then.

Problem Picture

1. Jane wants 4 dolls.
She has 3 dolls.
How many dolls must she get?

_____

Jane must get _____ doll.

Problem Picture

2. Susan had 6 cookies.
Spot ate 2 cookies.
How many cookies does Susan have now?

_____

Susan has _____ cookies now.

Problem Picture

3. Jack had 5 boats.
He made 2 more boats.
How many boats did Jack have then?

_____

Jack had _____ boats then.

Problem Picture

Solving Problems

1. Ann made 10 cookies.
   She gave 3 cookies to Bill.
   How many cookies did Ann have then?

   _____

   Then Ann had _____ cookies.

Problem Picture

2. Mrs. Lee had 3 hats.
   She got 2 new hats.
   How many hats does she have?

   _____

   Mrs. Lee has _____ hats now.

Problem Picture

3. Mother baked some cakes.
   She gave 4 cakes to the church.
   Then she had 2 cakes.
   How many cakes did Mother bake?

   _____

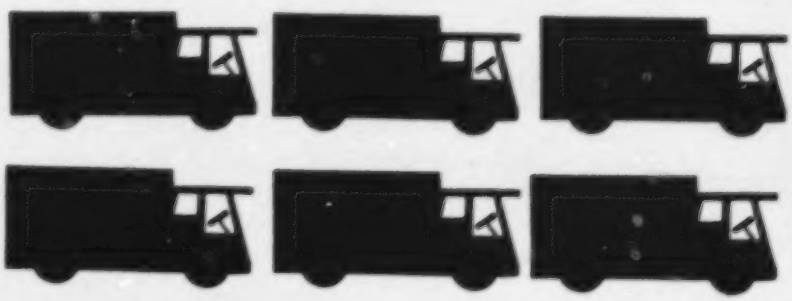
   Mother baked _____ cakes.

Problem Picture

How many rows? _____

How many in each row? _____

How many in the array? _____



How many rows? _____

How many in each row? _____

How many in the array? _____

ARRAYS

How many rows? _____

How many in each row? _____

How many in the array? _____

How many rows? _____

How many in each row? _____

How many in the array? _____

ARRAYS

How many rows? _____

How many in each row? ____

How many in the array? ____

How many rows? _____

How many in each row? ____

How many in the array? ____

How many rows? _____

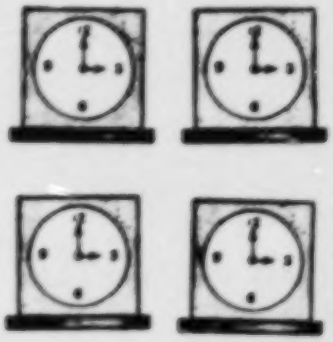
How many in each row? ____

How many in the array? ____

ARRAYS

How many sets of 2? _____

_____ twos are _____.



How many sets of 2? _____

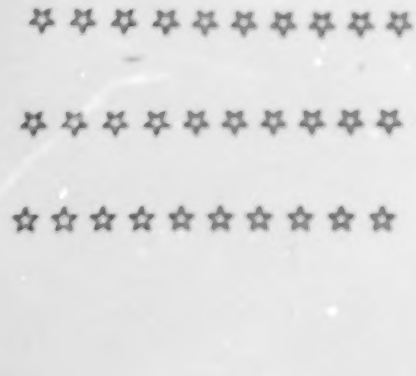
_____ twos are _____.

How many sets of 5? _____

_____ fives are _____.

How many sets of 3? _____

_____ threes are _____.

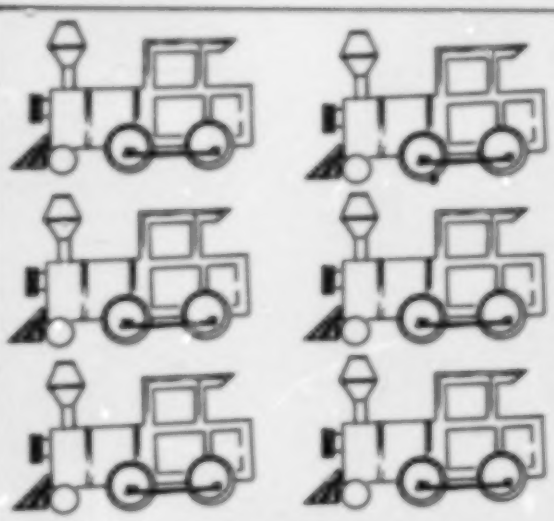


How many sets of 10? _____

_____ tens are _____.

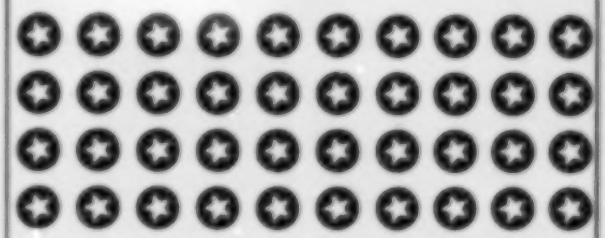
How many sets of 4? _____

_____ fours are _____.



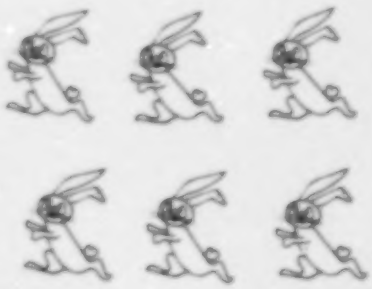
How many sets of 2? _____

_____ twos are _____.



How many sets of 10? _____

_____ tens are _____.



How many sets of 3? _____

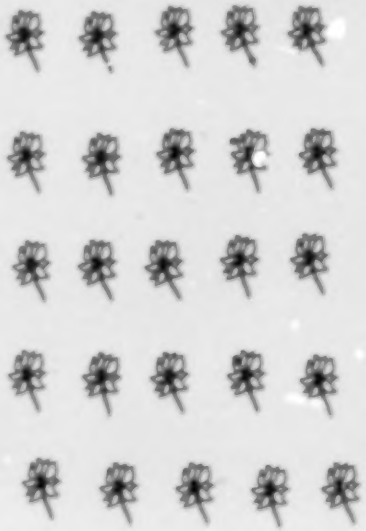
_____ threes are _____.

How many sets of 2? _____

_____ twos are _____.

How many sets of 5? _____

_____ fives are _____.



How many sets of 5? _____

_____ fives are _____.

Multiplication

Show 3 rows of 5.

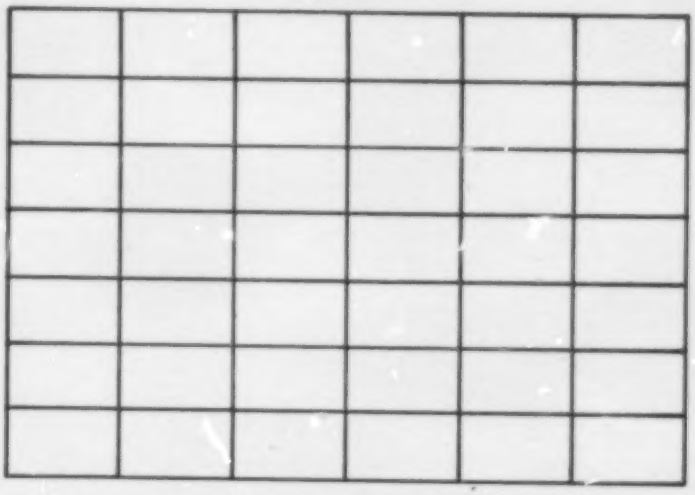
$3 \times 5 =$ ____

Show 6 rows of 3.

$6 \times 3 =$ ____

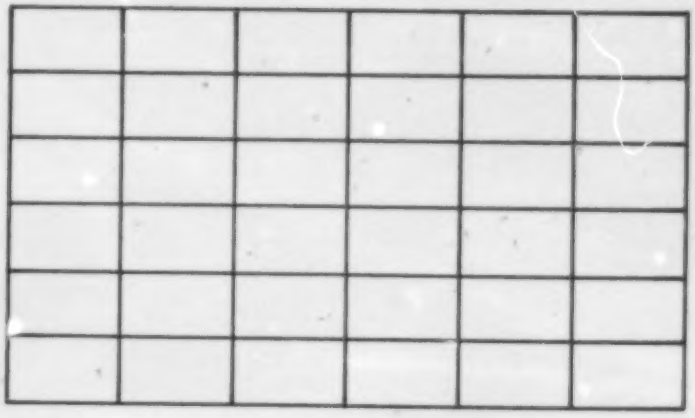
Multiplication

Show 5 rows of 5.



5 × 5 = ____

Show 3 rows of 4.



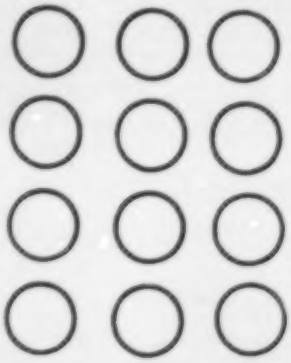
3 × 4 = ____

Show 5 rows of 10.

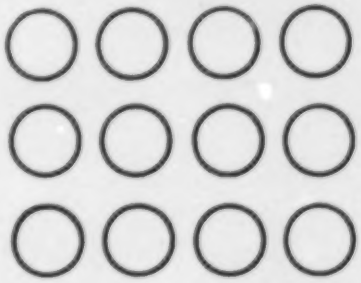
$5 \times 10 =$ ____

Show 6 rows of 2.

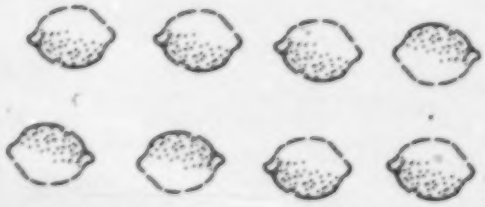
$6 \times 2 =$ ____



4 × ____ = ____

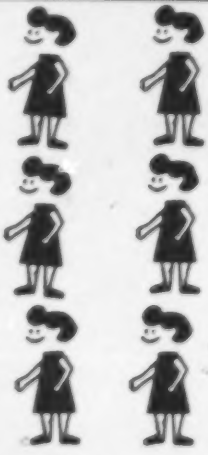


3 × ____ = ____

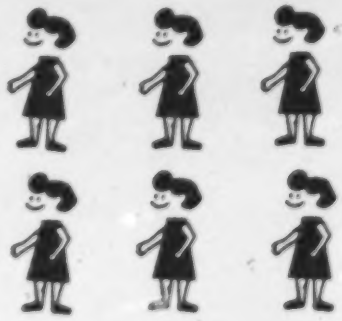


2 × ____ = ____

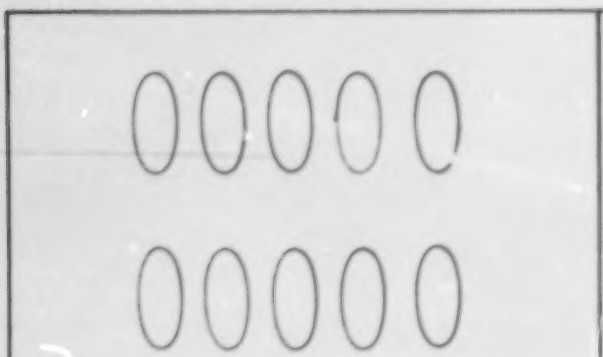
4 × ____ = ____



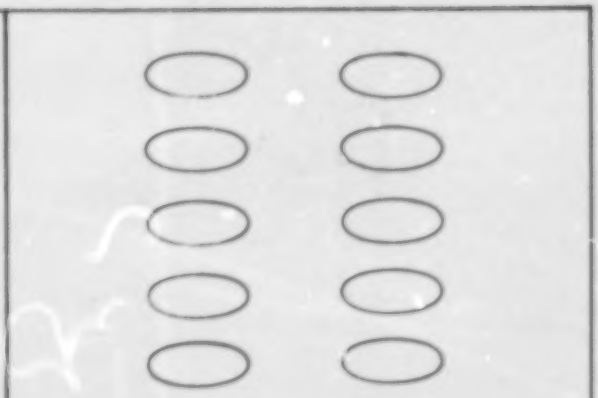
3 × ____ = ____



2 × ____ = ____



2 × ___ = ___



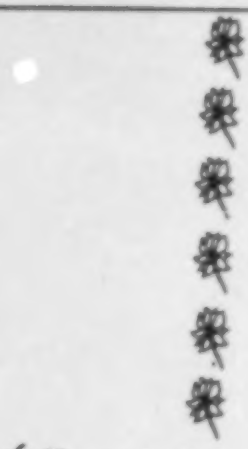
5 × ___ = ___

6 × ___ = ___

2 × ___ = ___

5 × ___ = ___

3 × ___ = ___



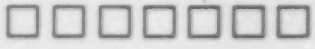
6 × ____ = ____

1 × ____ = ____

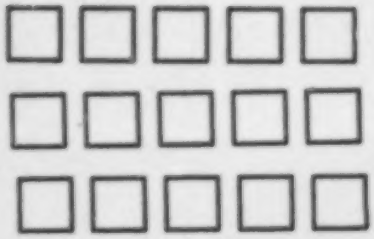
1 × ____ = ____

4 × ____ = ____

7 × ____ = ____

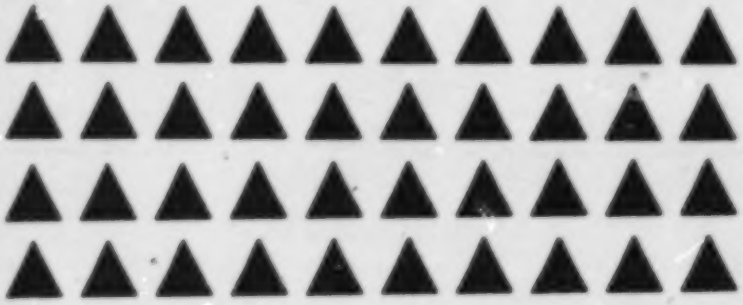


1 × ____ = ____



$3 \times 5 =$ ____

$5 \times 3 =$ ____

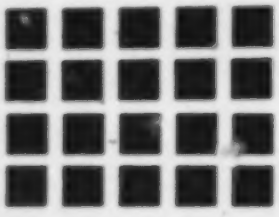


$4 \times 10 =$ ____

$10 \times 4 =$ ____

$2 \times 7 =$ ____

$7 \times 2 =$ ____



$4 \times 5 =$ ____

$5 \times 4 =$ ____

Multiplication

$2 \times 5 =$ _____

$5 \times 2 =$ _____

$1 \times 3 =$ _____

$3 \times 1 =$ _____

$3 \times 6 =$ _____

$6 \times 3 =$ _____

$3 \times 7 =$ _____

$7 \times 3 =$ _____

$4 \times 5 =$ _____

$5 \times 4 =$ _____

$5 \times 1 =$ _____

$1 \times 5 =$ _____

$2 \times 7 =$ _____

$7 \times 2 =$ _____

$3 \times 8 =$ _____

$8 \times 3 =$ _____

There are ____ trees.

Ring sets of 5.

There are ____ sets of 5.

There are ____ balls.

Ring sets of 3.

There are ____ sets of 3.

There are ____ houses.

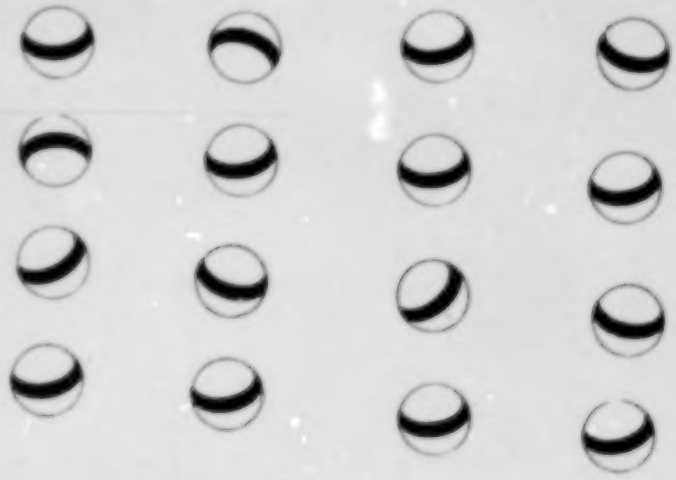
Ring sets of 8.

There are ____ sets of 8.

There are ____ kites.

Ring sets of 4.

There are ____ sets of 4.



There are ____ balls.

There are ____ sets of 2.

Ring sets of 2.

_____ is _____ twos.

There are _____ trees.

Ring sets of 3.

There are _____ sets of 3.

_____ is _____ threes.

There are ____ houses.

Ring sets of 5.

There are _____ sets of 5.

_____ is _____ fives.

There are _____ houses.

Ring sets of 7.

There are _____ sets of 7.

_____ is _____ sevens.

Show 6 balls.

Have 3 balls in each row.

There are _____ balls.

_____ is _____ threes.

6 = _____ × 3.

Show 6 balls.

Have 2 balls in each row.

There are _____ balls.

_____ is _____ twos.

6 = _____ × 2.

Show 8 balls.

Have 4 balls in each row.

There are _____ balls.

_____ is _____ fours.

8 = _____ × 4.

Show 10 balls.

Have 2 balls in each row.

There are _____ balls.

_____ is _____ twos.

10 = _____ × 2.

Show 8 boxes.

Have 2 boxes in each row.

There are _____ boxes.

_____ is _____ twos.

8 = _____ × 2.

Show 12 boxes.

Have 3 boxes in each row.

There are _____ boxes.

_____ is _____ threes.

12 = _____ × 3.

Show 15 boxes.

Have 5 boxes in each row.

There are _____ boxes

_____ is _____ fives.

15 = _____ × 5.

Show 12 boxes.

Have 4 boxes in each row.

There are _____ boxes.

_____ is _____ fours.

12 = _____ × 4.

Partitioning

There are _____ apples

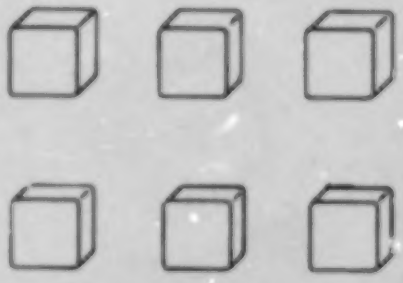
Show 3 sets.

6 is three _____'s.

6 = 3 × _____.

There are _____ blocks.

Show 2 sets.



6 is two _____'s.

6 = 2 × _____.

There are _____ umbrellas.

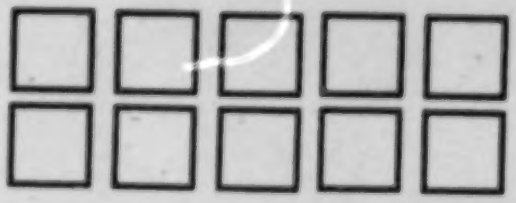
Show 2 sets.

4 is two _____'s.

4 = 2 × _____.

There are _____ squares.

Show 5 sets.

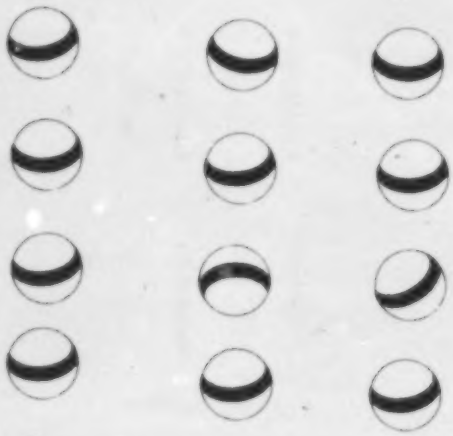


10 is five _____'s.

10 = 5 × _____.

There are _____ balls.

Show 3 sets.

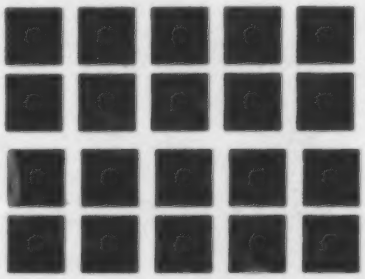


12 is three _____'s.

12 = 3 × _____.

There are _____ blocks.

Show 4 sets.

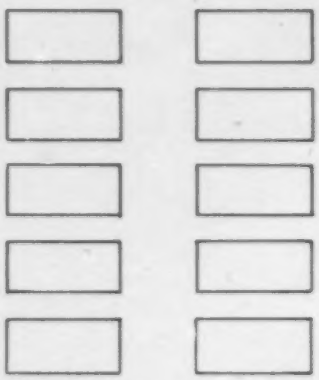


20 is four _____'s.

20 = 4 × _____.

There are _____ rectangles.

Show 5 sets.

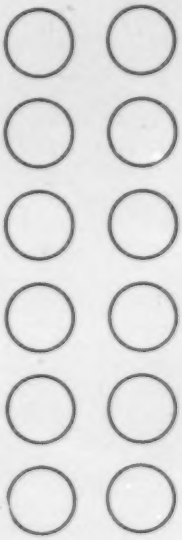


10 is five _____'s.

10 = 5 × _____.

There are _____ circles.

Show 6 sets.



12 is six _____'s.

12 = 6 × _____.

There are _____ bananas.

Show 3 sets.

6 is three _____'s.

6 = 3 × _____.

There are _____ candles.

Show 2 sets.

8 is two _____'s.

8 = 2 × _____.

There are _____ stars.

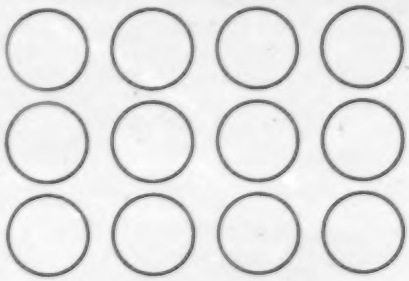
Show 4 sets.

16 is four _____'s.

16 = 4 × _____.

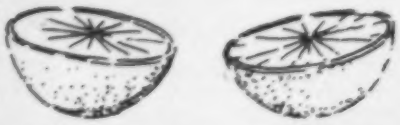
There are _____ circles.

Show 2 sets.



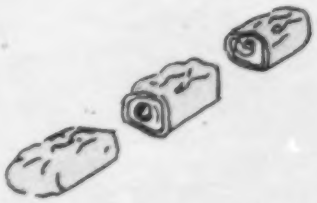
12 is two _____'s.

12 = 2 × _____.



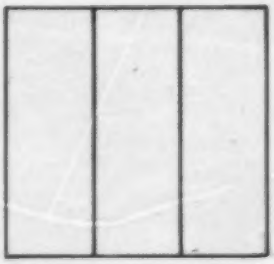
There are _____ parts.

Color 1 part red.



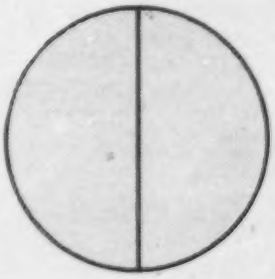
There are _____ parts.

Color 1 part blue.



There are _____ parts.

Color 1 part green.

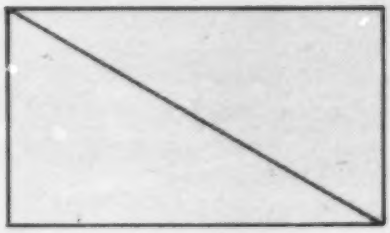


There are _____ parts.

Color 1 part green.

There are _____ parts.

Color 1 part blue.



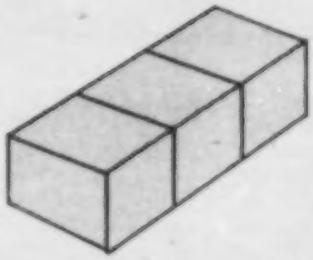
There are _____ parts.

Color 1 part red.

Parts of Regions

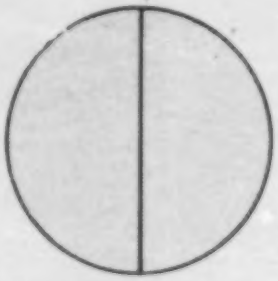
There are _____ parts.

Color 2 parts red.



There are _____ parts.

Color 3 parts red.

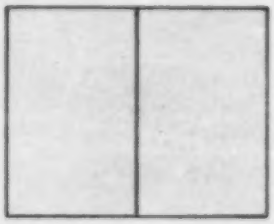


There are _____ parts.

Color 2 parts blue.

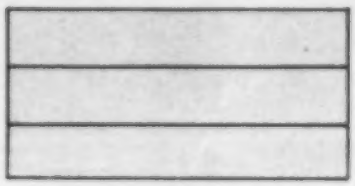
There are _____ parts.

Color 3 parts blue.



There are _____ parts.

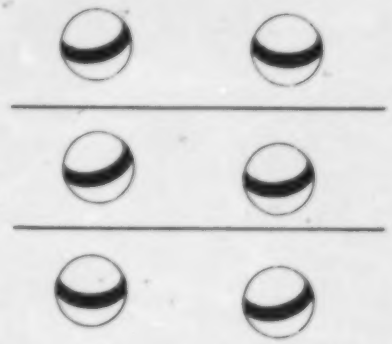
Color 2 parts green.



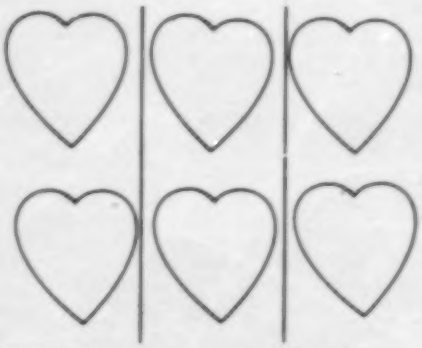
There are _____ parts.

Color 3 parts green.

There are ___ parts. Color 1 part.

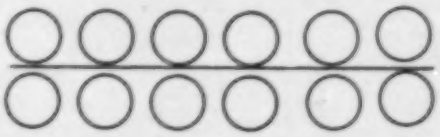


There are ____ parts. Color 1 part.



There are _____ parts.

Color 1 part.

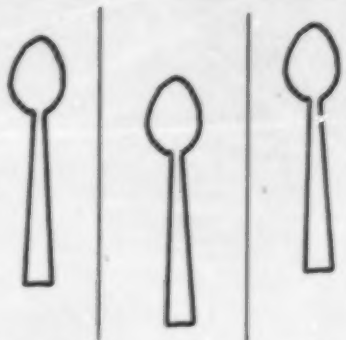


There are _____ parts.

Color 1 part.

There are _____ parts.

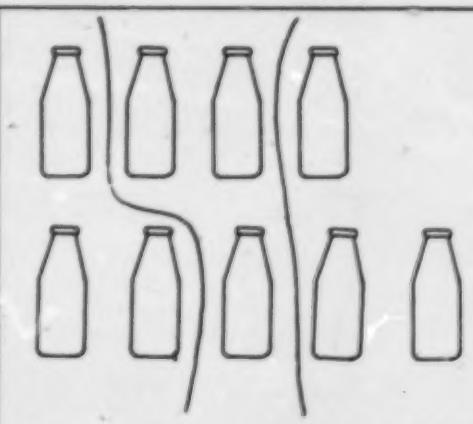
Color 2 parts.



There are _____ parts.

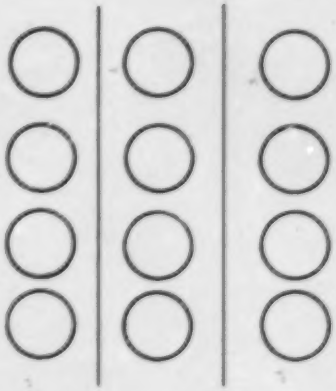
Color 2 parts.

There are ___ parts. Color 2 parts.

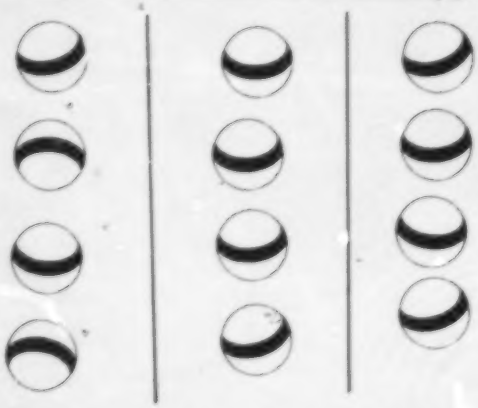


There are ___ parts. Color 2 parts.

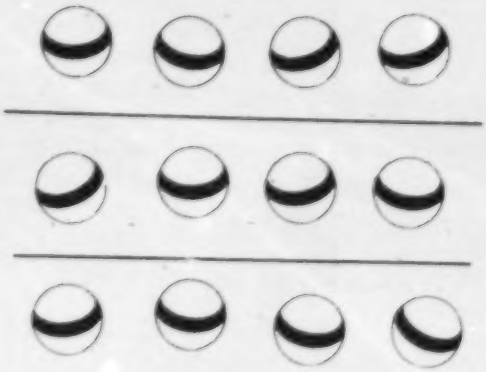
There are ___ parts. Color 2 parts.



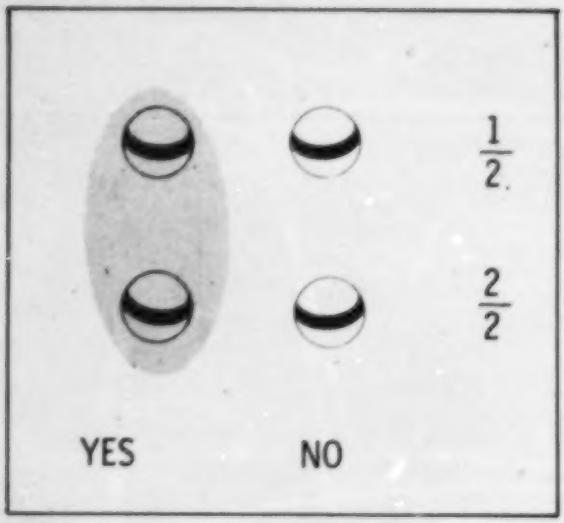
There are ___ parts. Color 3 parts.

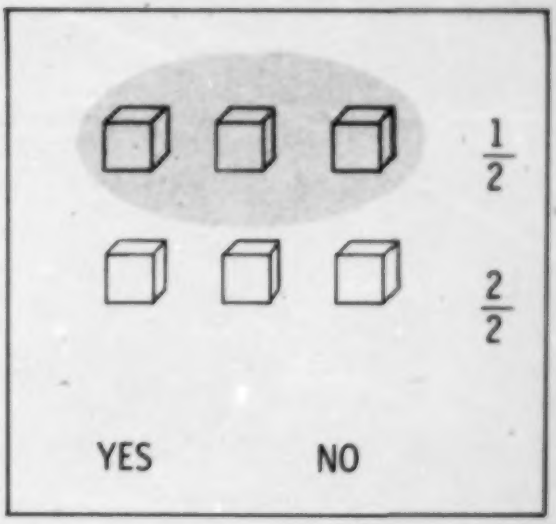


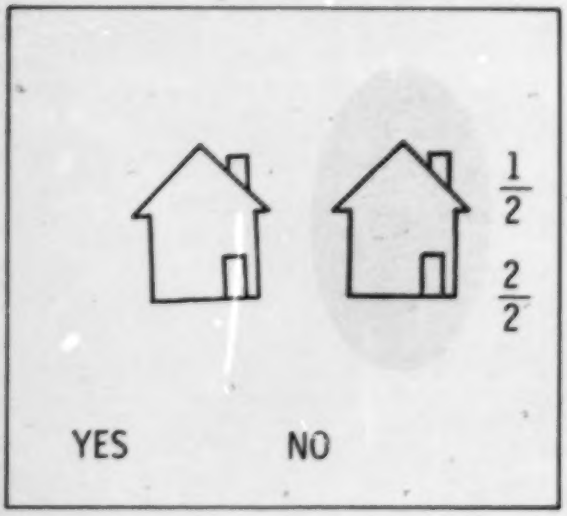
There are ___ parts. Color 1 part.

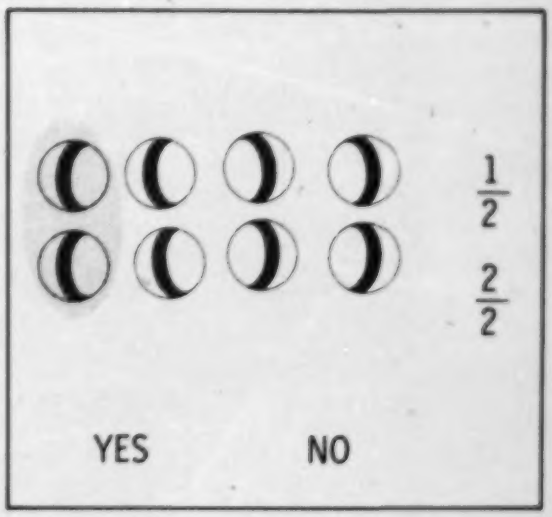


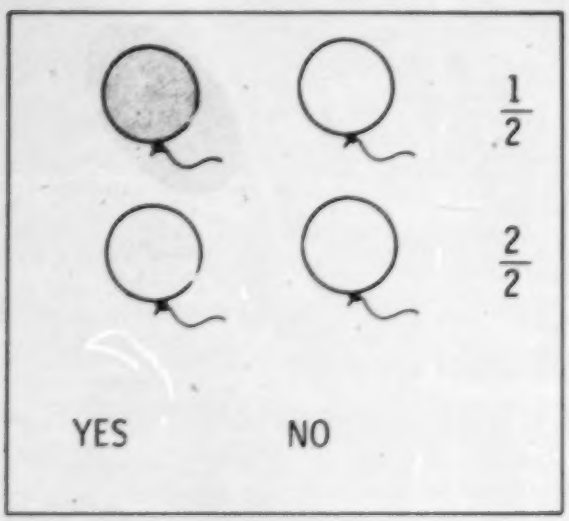
There are ___ parts. Color 2 parts.

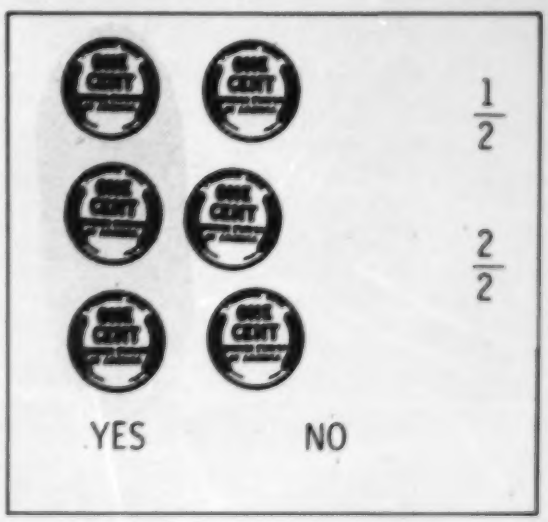

1/2
2/2
YES
NO


1/2
2/2
YES
NO


1/2
2/2
YES
NO


1/2
2/2
YES
NO


1/2
2/2
YES
NO

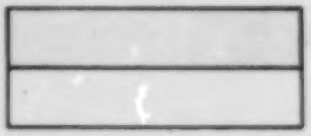

1/2
2/2
YES
NO

One Half

$\frac{1}{2}$

$\frac{2}{2}$

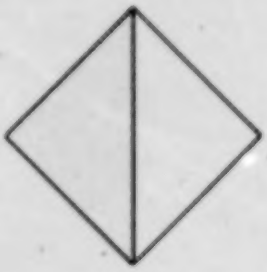
YES NO



$\frac{1}{2}$

$\frac{2}{2}$

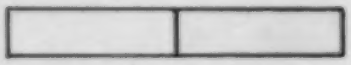
YES NO



$\frac{1}{2}$

$\frac{2}{2}$

YES NO



$\frac{1}{2}$

$\frac{2}{2}$

YES NO

$\frac{1}{2}$

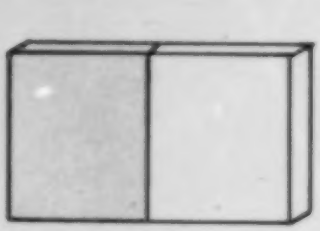
$\frac{2}{2}$

YES NO

$\frac{1}{2}$

$\frac{2}{2}$

YES NO



$\frac{1}{2}$

$\frac{2}{2}$

YES NO

$\frac{1}{2}$

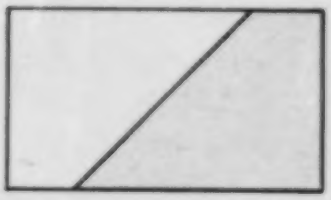
$\frac{2}{2}$

YES NO

$\frac{1}{2}$

$\frac{2}{2}$

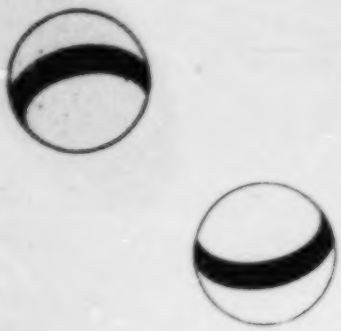
YES NO



$\frac{1}{2}$

$\frac{2}{2}$

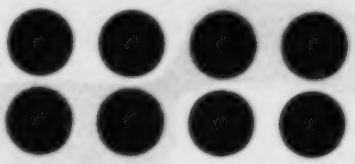
YES NO



$\frac{1}{2}$

$\frac{2}{2}$

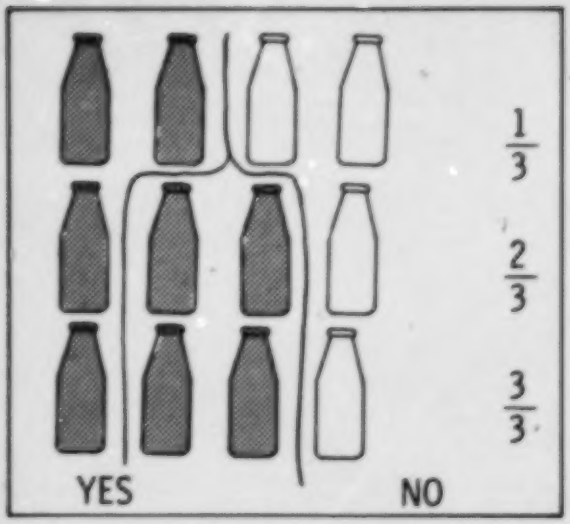
YES NO

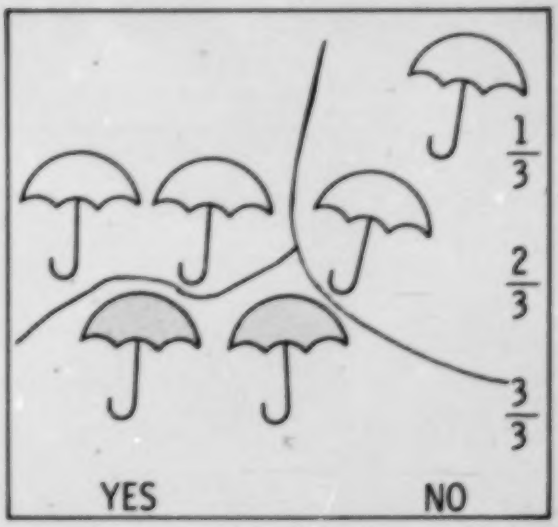


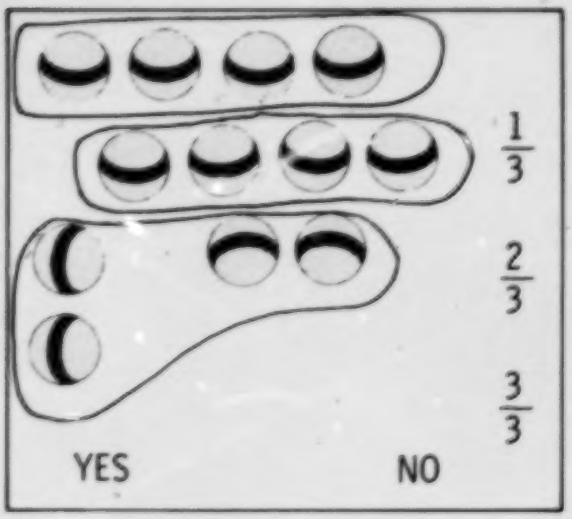
$\frac{1}{2}$

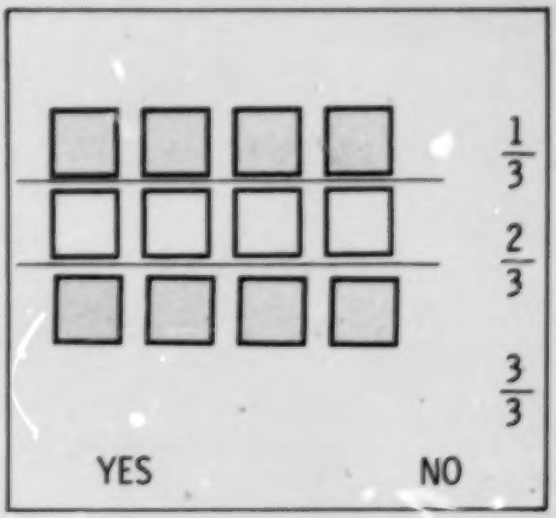
$\frac{2}{2}$

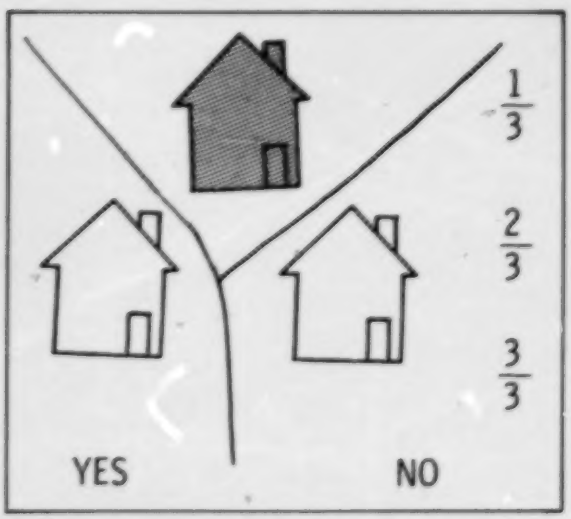
YES NO

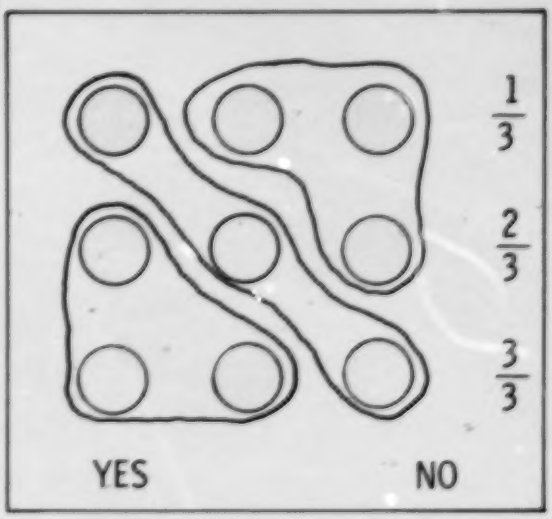

1/3
2/3
3/3
YES
NO


1/3
2/3
3/3
YES
NO


1/3
2/3
3/3
YES
NO


1/3
2/3
3/3
YES
NO


1/3
2/3
3/3
YES
NO


1/3
2/3
3/3
YES
NO

One-Third

$\frac{1}{3}$ $\frac{2}{3}$ $\frac{3}{3}$

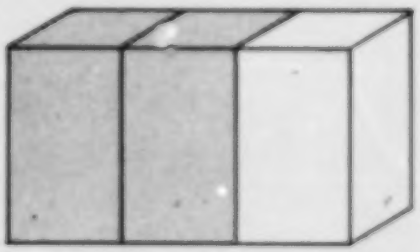
YES NO

$\frac{1}{3}$ $\frac{2}{3}$ $\frac{3}{3}$

YES NO

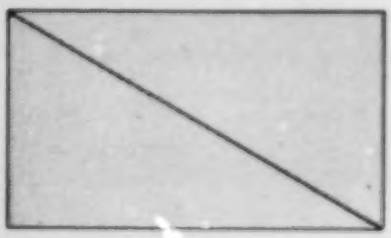
$\frac{1}{3}$ $\frac{2}{3}$ $\frac{3}{3}$

YES NO



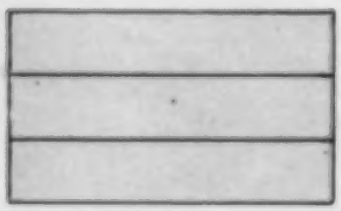
$\frac{1}{3}$ $\frac{2}{3}$ $\frac{3}{3}$

YES NO



$\frac{1}{3}$ $\frac{2}{3}$ $\frac{3}{3}$

YES NO



$\frac{1}{3}$ $\frac{2}{3}$ $\frac{3}{3}$

YES NO

Regions

Ring the correct numeral

$\frac{1}{2}$

$\frac{1}{3}$

NO

$\frac{1}{3}$

$\frac{1}{2}$

NO

$\frac{1}{3}$

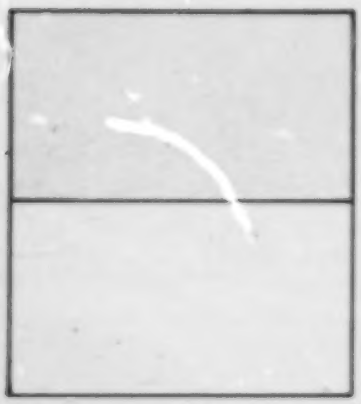
$\frac{1}{2}$

NO

$\frac{1}{3}$

$\frac{1}{2}$

NO



$\frac{1}{2}$

$\frac{1}{3}$

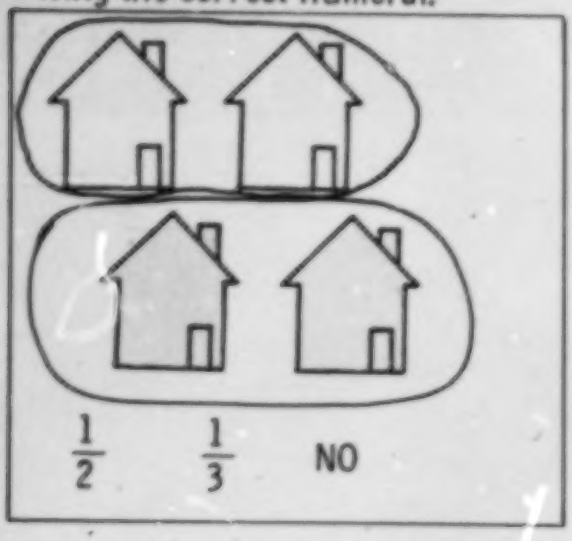
NO

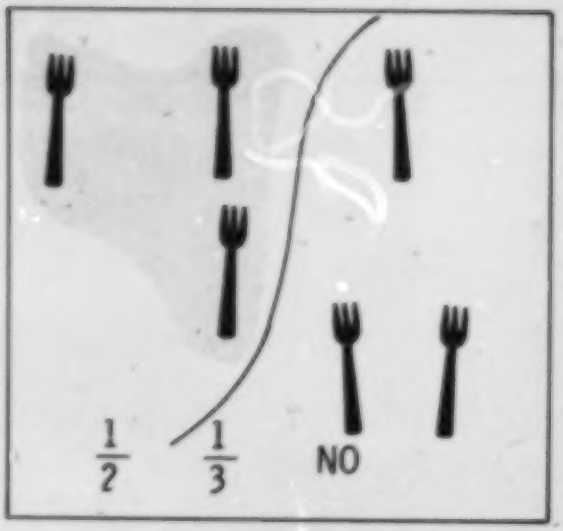
$\frac{1}{3}$

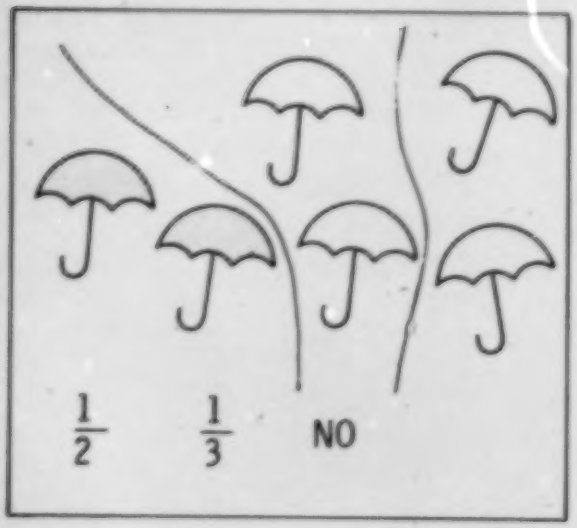
$\frac{1}{2}$

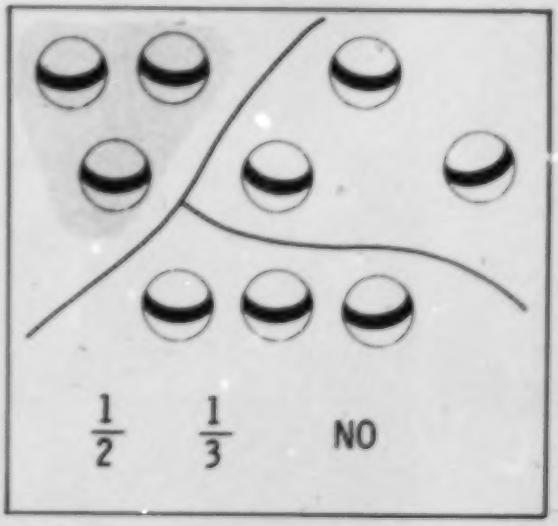
NO

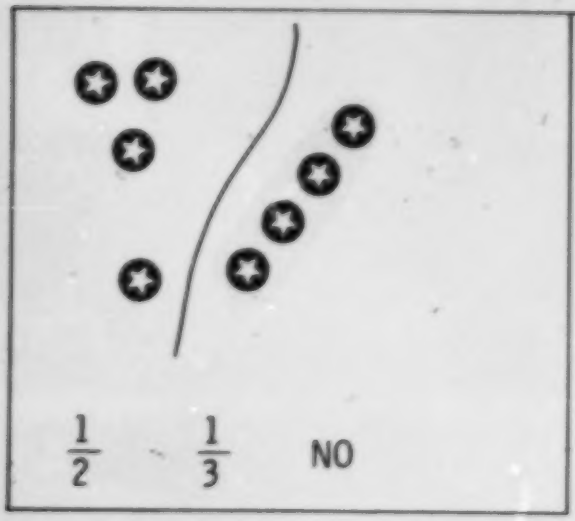
Sets of Objects
Ring the correct numeral.

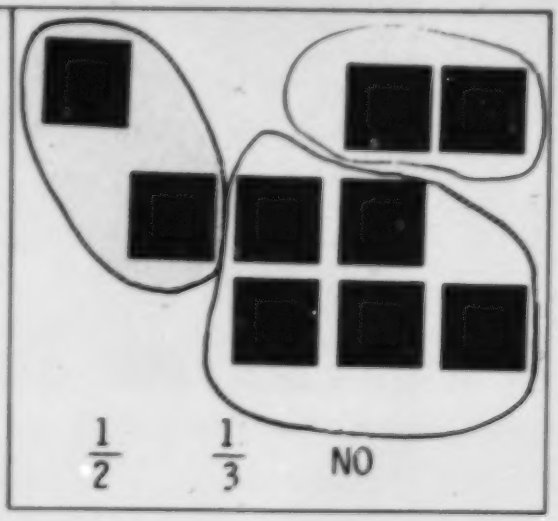










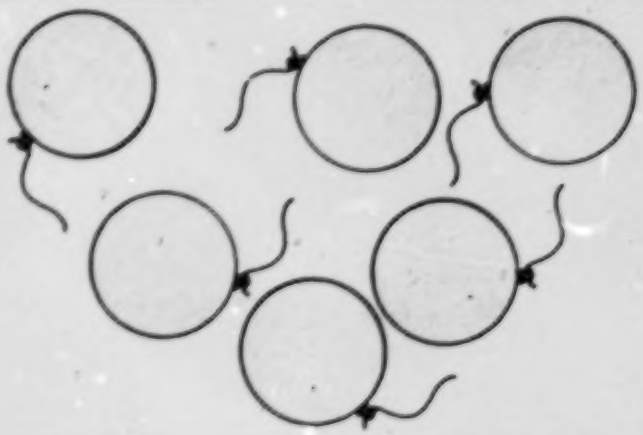


One Half

Color $\frac{1}{2}$ of each set blue. Color the other half red. Fill the blanks.

There are _____ stars.

$\frac{1}{2}$ of 6 is _____.



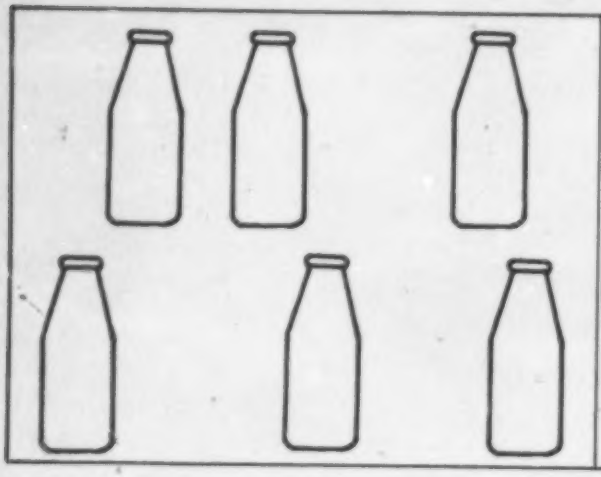
There are _____ balloons.

$\frac{1}{2}$ of 6 is _____.

There are _____ umbrellas.

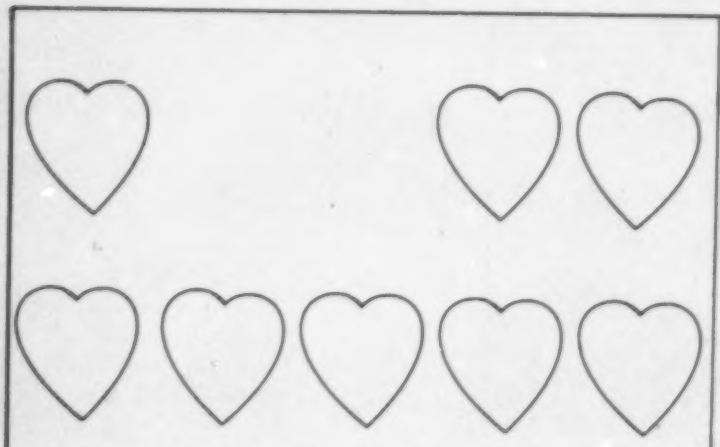
$\frac{1}{2}$ of 4 is _____.

Color $\frac{1}{2}$ of each set blue. Color the other half red. Fill in the blanks.



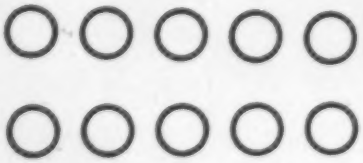
There are _____ bottles.

$\frac{1}{2}$ of 6 is _____.



There are _____ hearts.

$\frac{1}{2}$ of 8 is _____.



There are _____ circles.

$\frac{1}{2}$ of 10 is _____.

Color $\frac{1}{3}$ of each set blue. Color $\frac{1}{3}$ of each set red. Color $\frac{1}{3}$ of each set green. Fill in the blanks.

There are ____ umbrellas.

$\frac{1}{3}$ of 6 is ____.

There are ____ milk bottles.

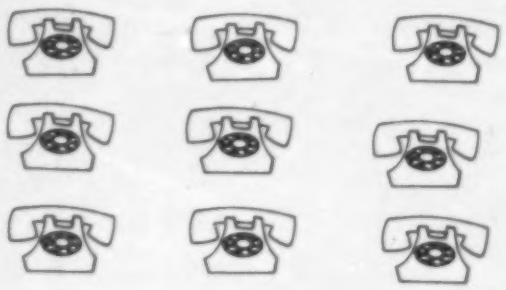
$\frac{1}{3}$ of 6 is ____.

There are ____ houses.

$\frac{1}{3}$ of 3 is ____.

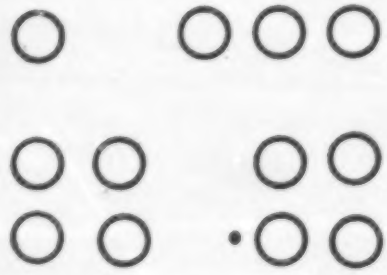
One Third

Color $\frac{1}{3}$ of each set blue. Color $\frac{1}{3}$ of each set red. Color $\frac{1}{3}$ of each set green. Fill the blanks.



There are ____ telephones.

$\frac{1}{3}$ of 9 is ____.



There are ____ circles.

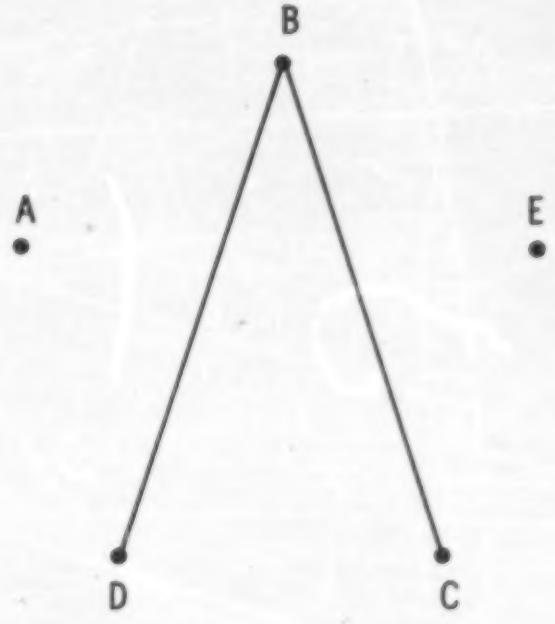
$\frac{1}{3}$ of 12 is _____.

There is ____ region.

$\frac{1}{3}$ of 1 is ____.

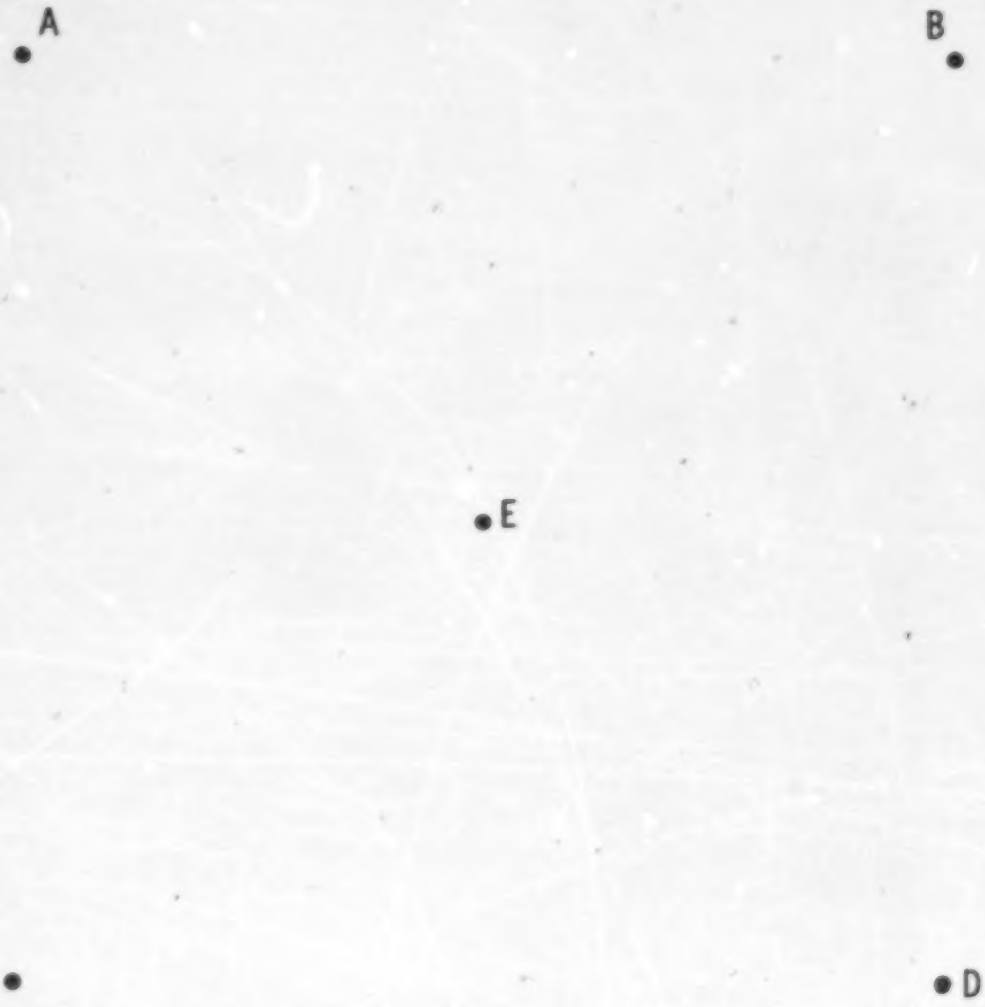
Draw $\overline{AC}$, $\overline{EC}$, and $\overline{BD}$.

Draw $\overline{AE}$, $\overline{AC}$, and $\overline{DE}$



Draw $\overline{AB}$, $\overline{BD}$, $\overline{DC}$ and $\overline{CA}$.

Connect point E with the other points.



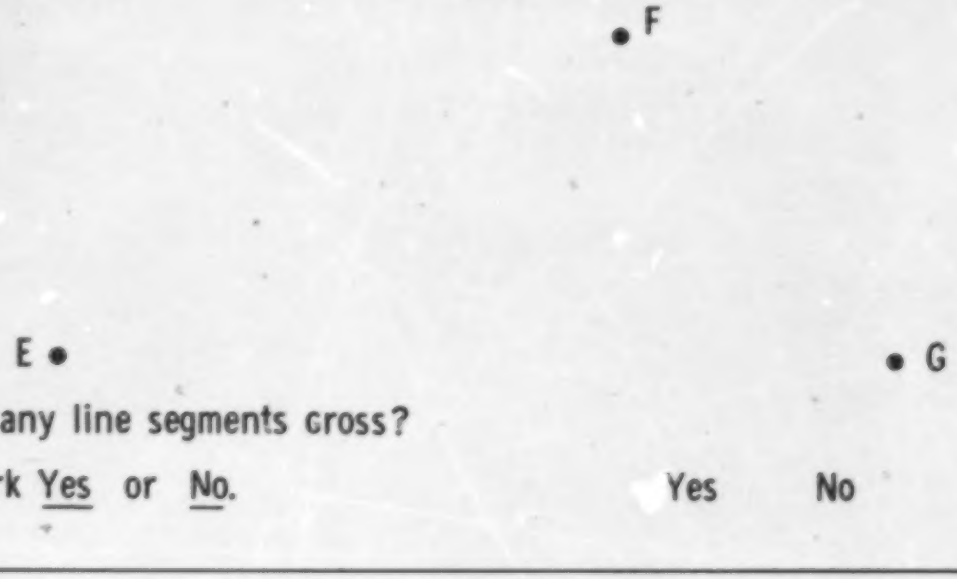
How many line segments can you count? _____

Color a square region red.

Color one triangular region blue.

Line Segments

Connect each point by a line segment to each of the other points.



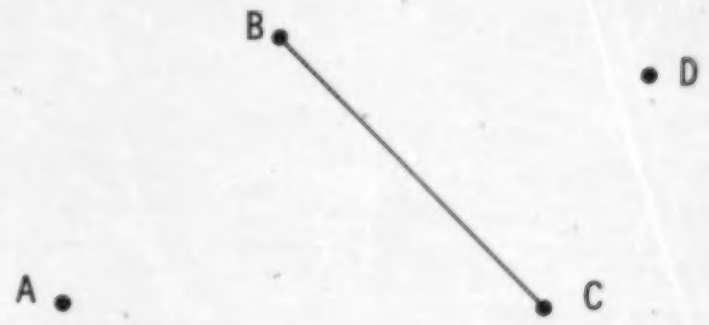
Do any line segments cross?

Mark Yes or No. Yes No

How many line segments cross? _____

Draw $\overline{AB}$ and $\overline{AC}$.

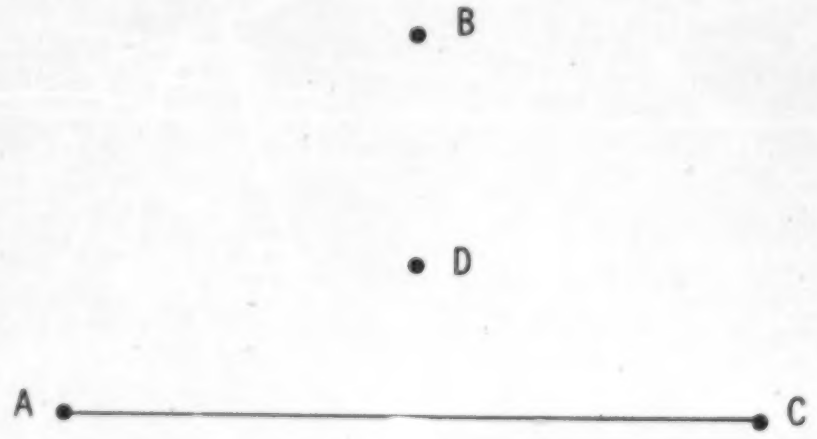
Now connect point D with the other points.



How many line segments cross? _____

Draw $\overline{BA}$ and $\overline{BC}$.

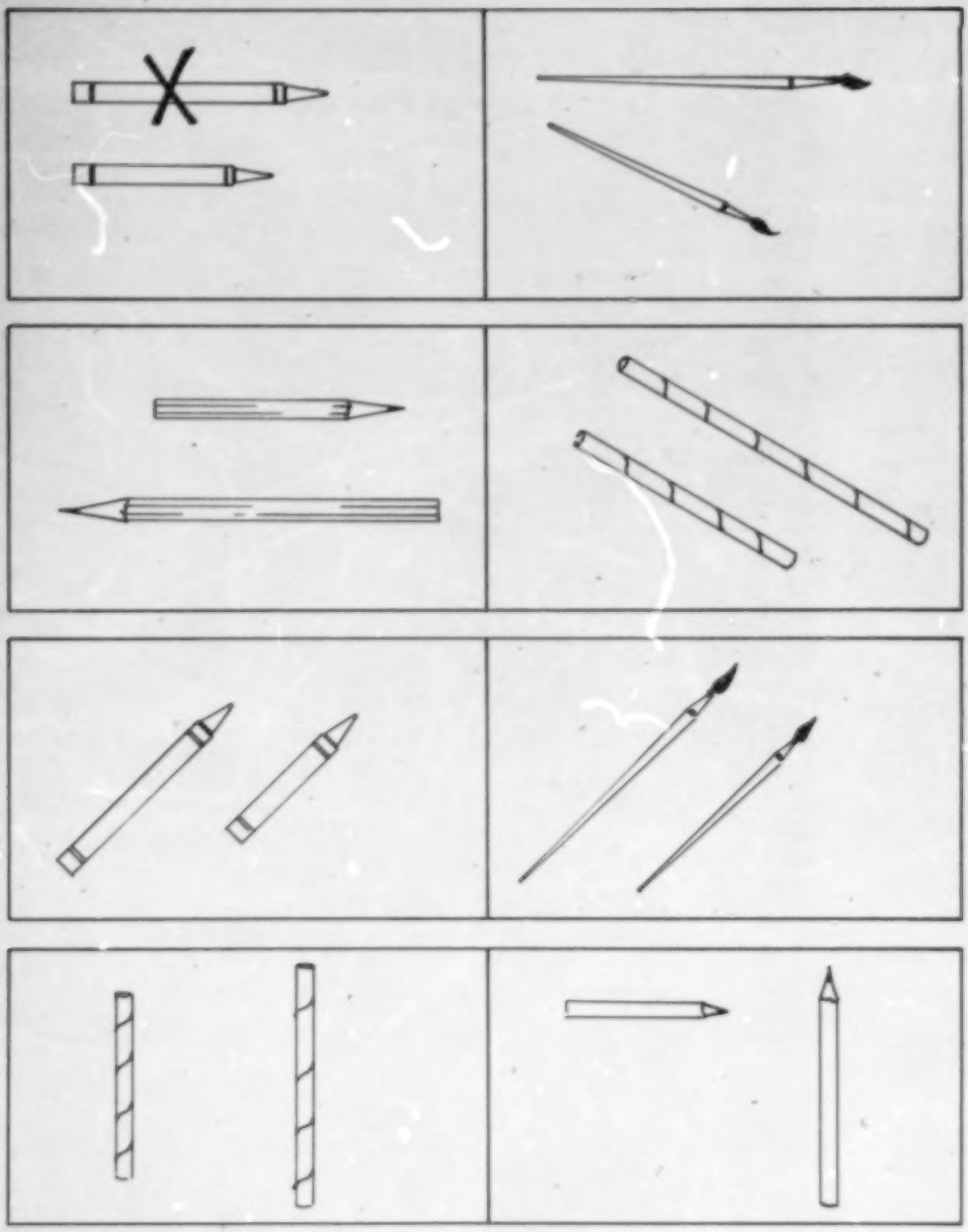
Now connect point D with the other points.



Do any line segments cross? Yes No

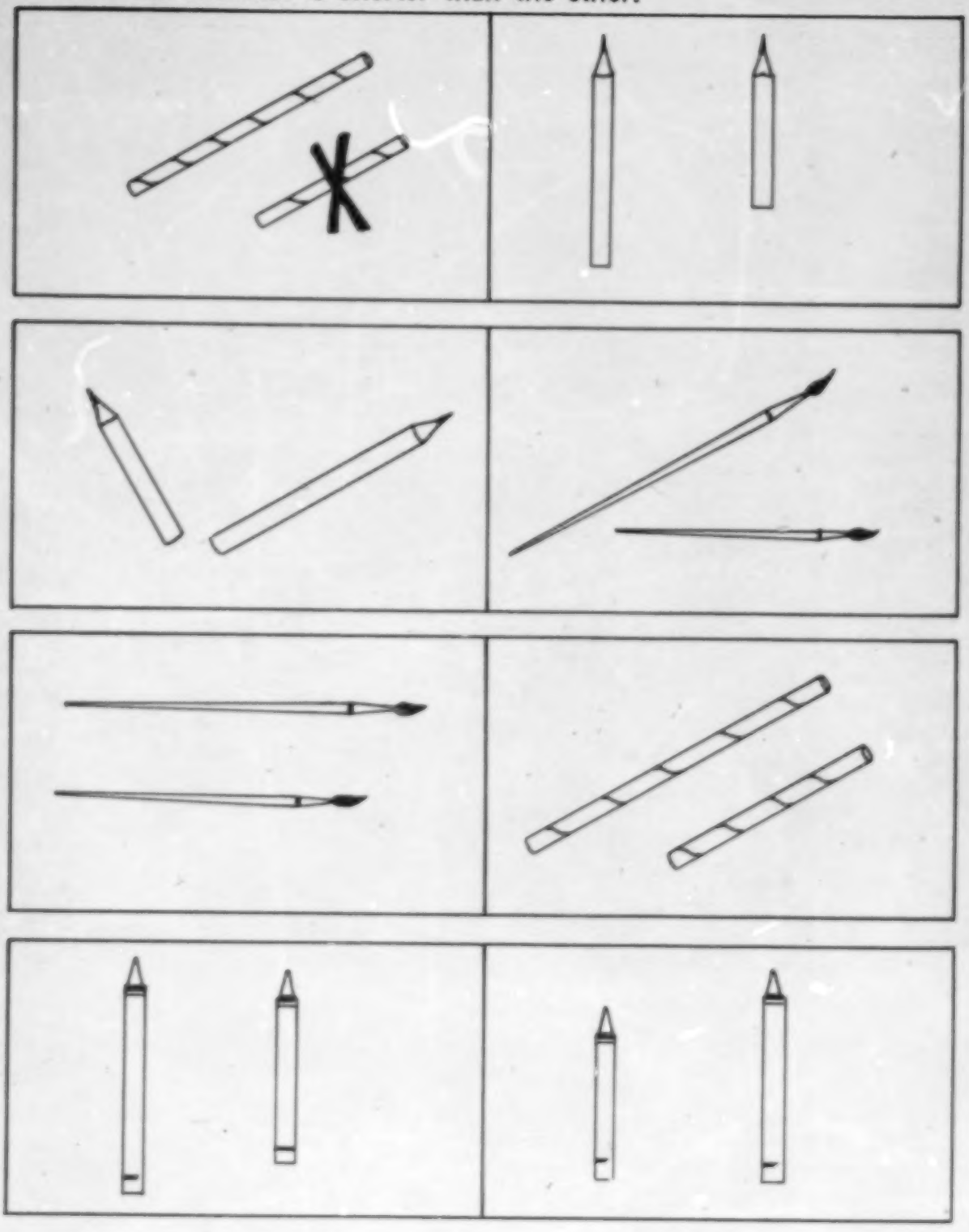
Comparing Lengths

Mark the one that is longer than the other.



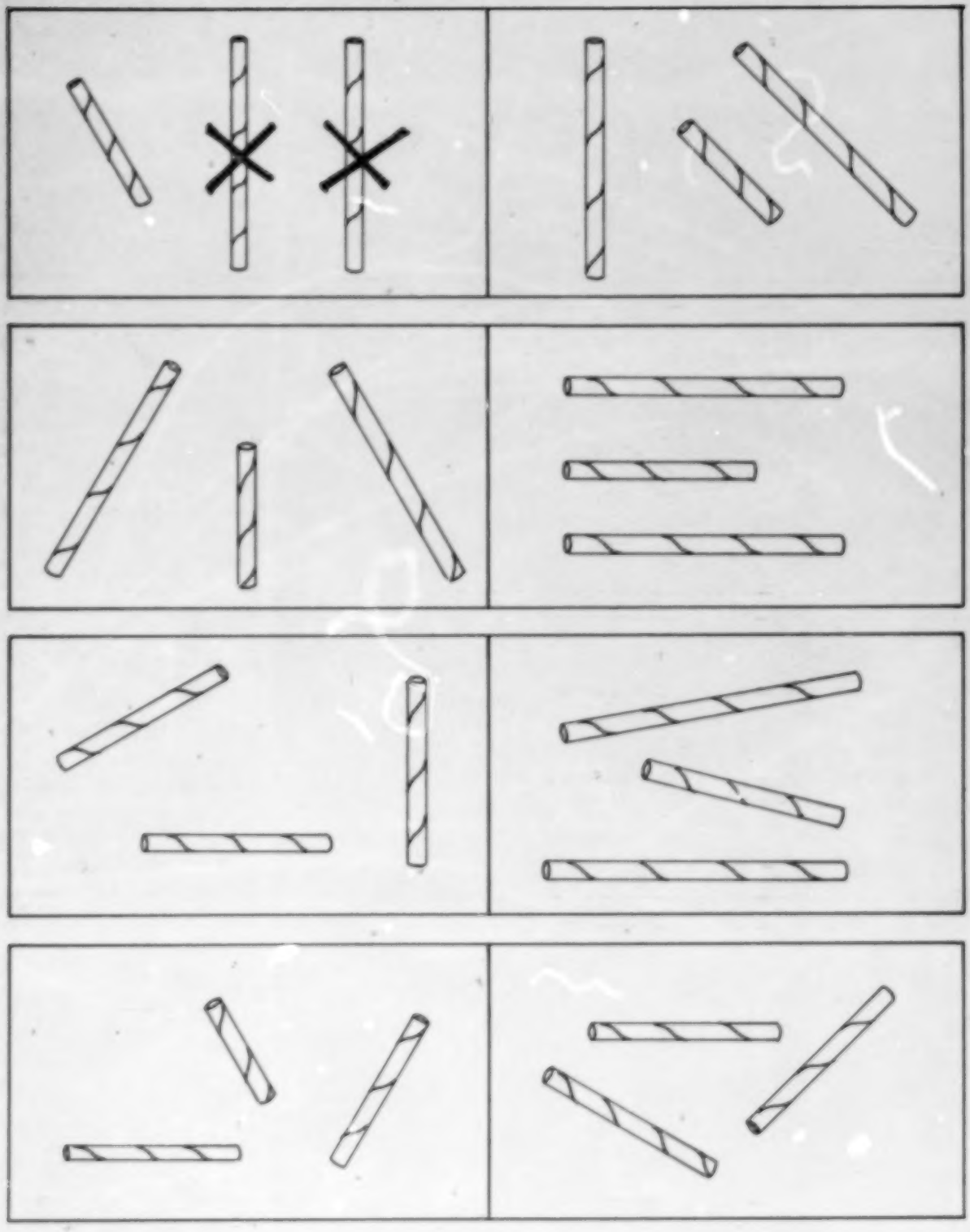
Comparing Lengths

Mark the one that is shorter than the other.



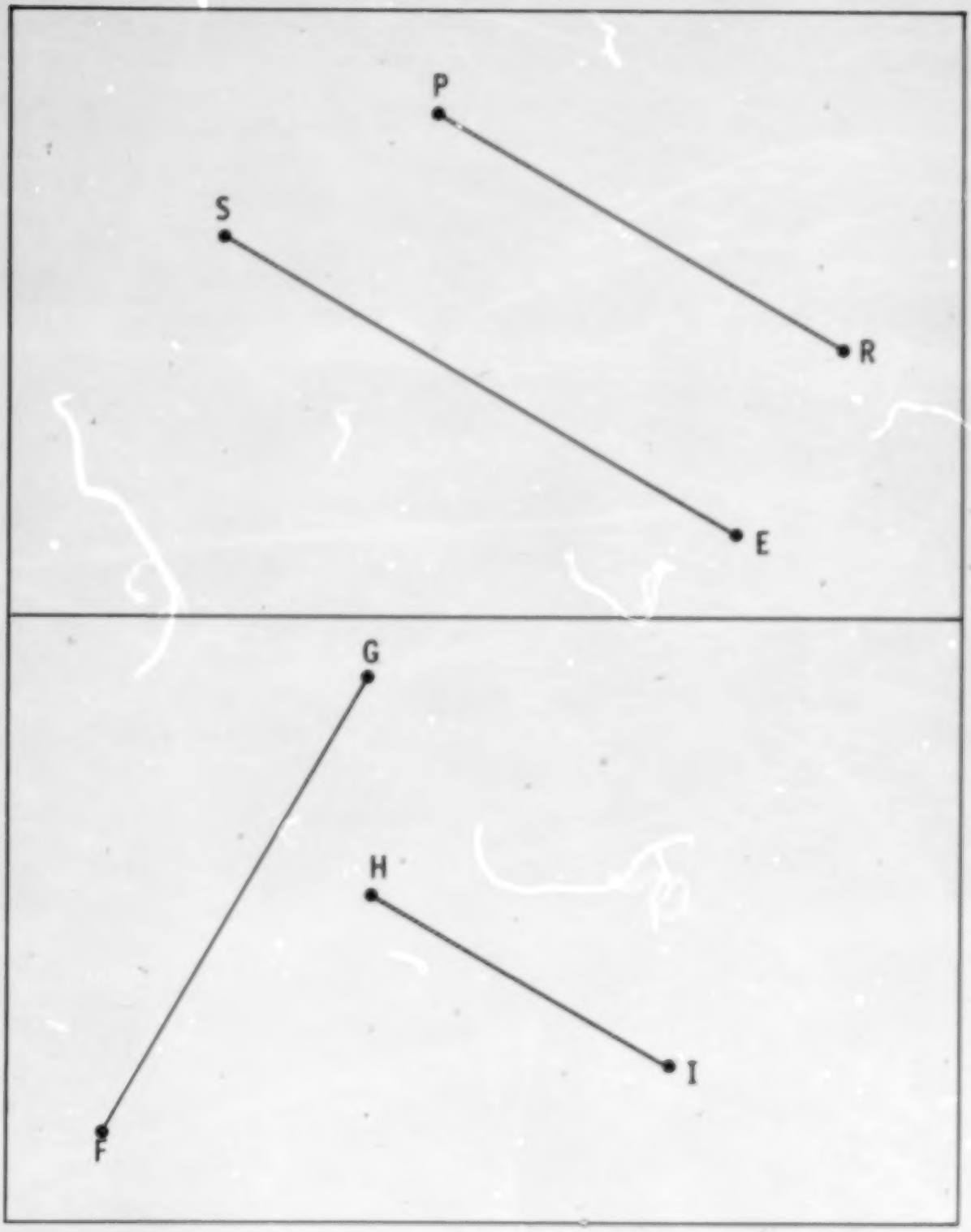
Comparing Lengths

Mark the sticks that are the same length.



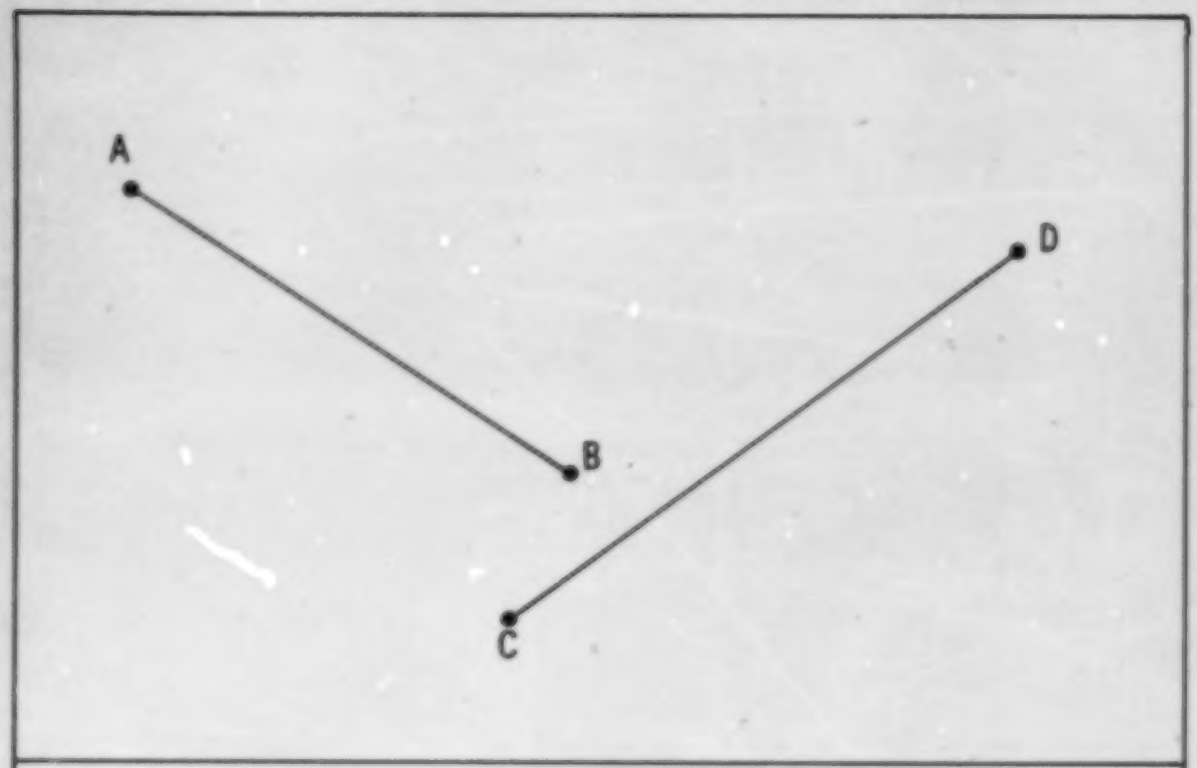
Comparing Line Segments

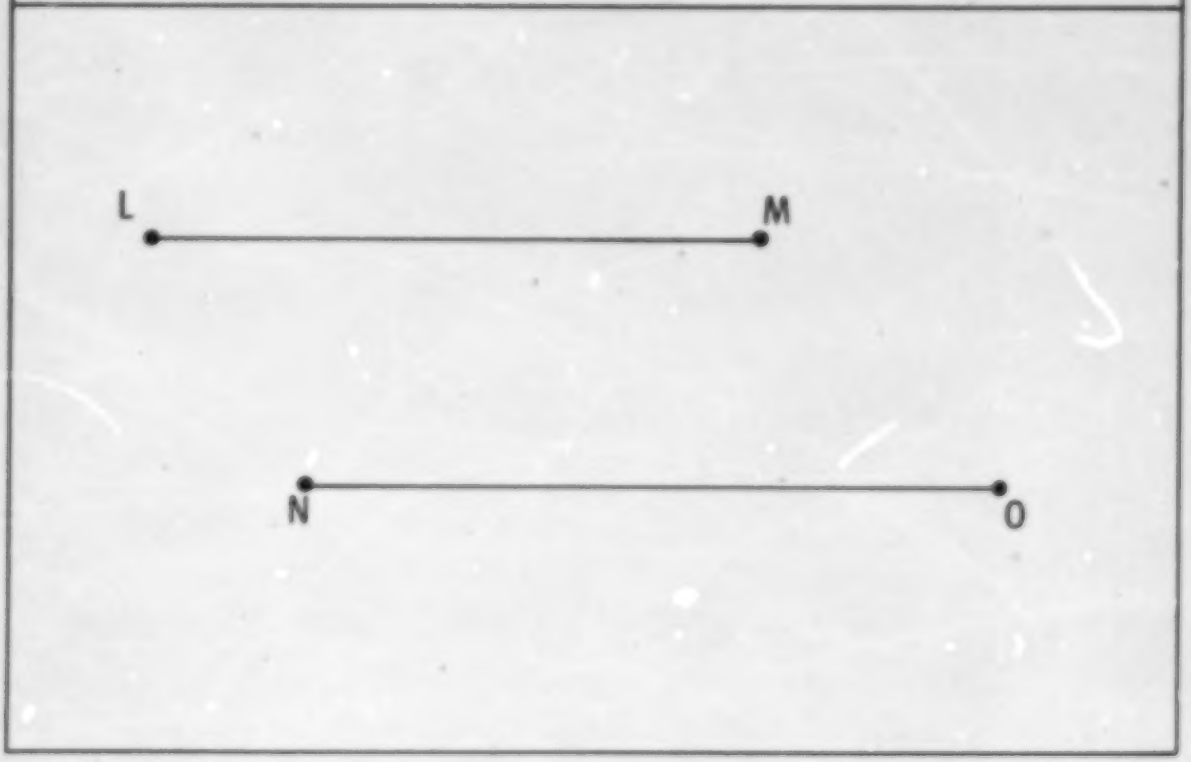
Mark the line segment that is longer than the other one.



Comparing Line Segments

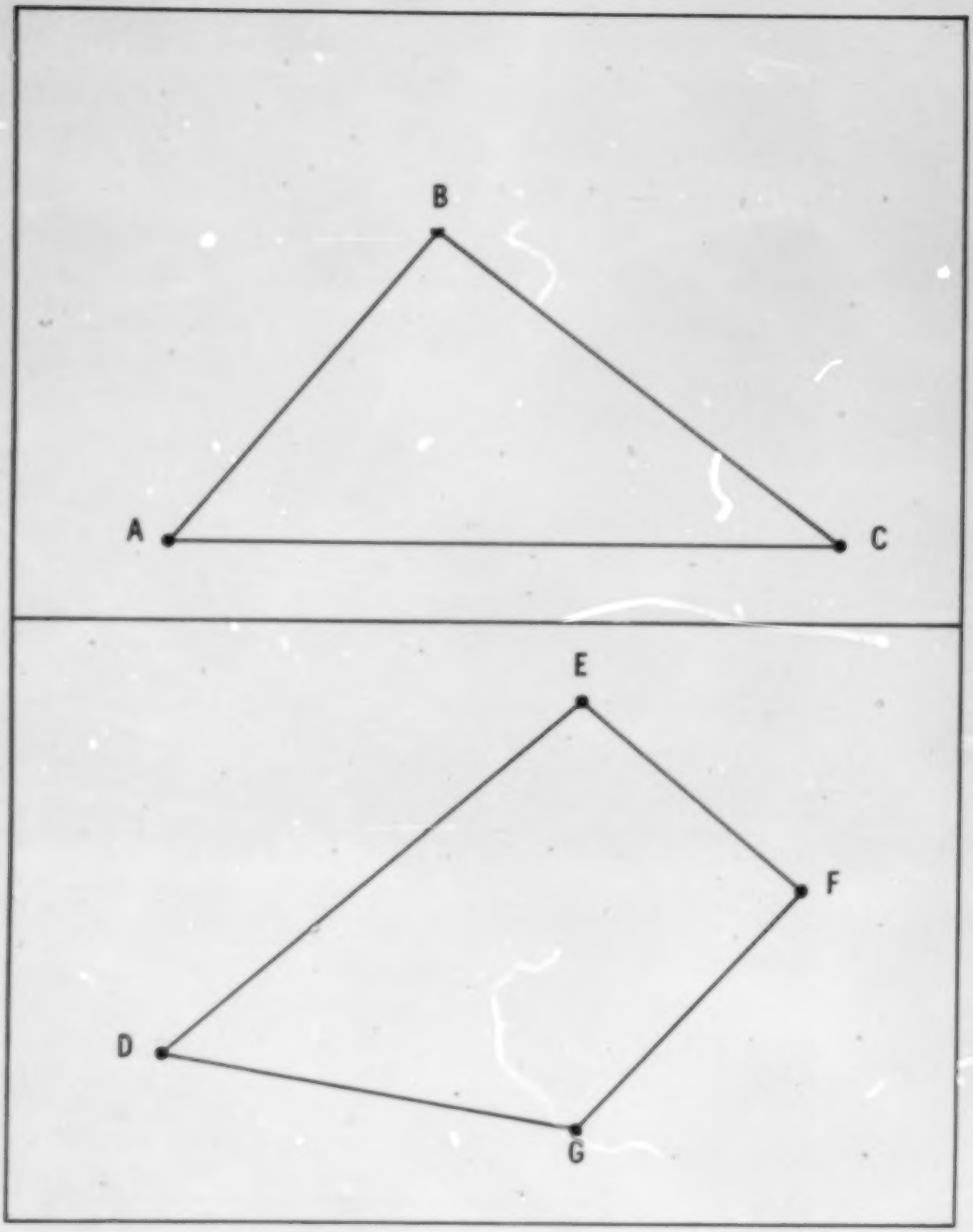
Mark the line segment that is shorter than the other one.





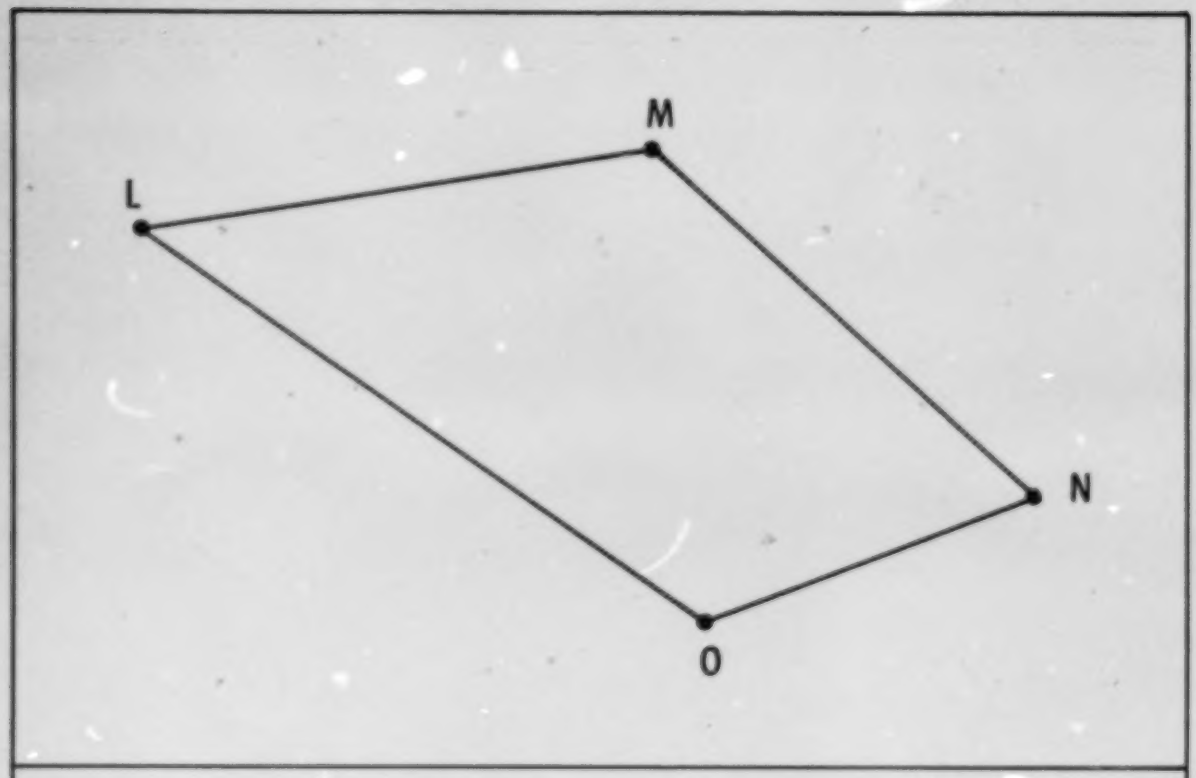
Comparing Line Segments

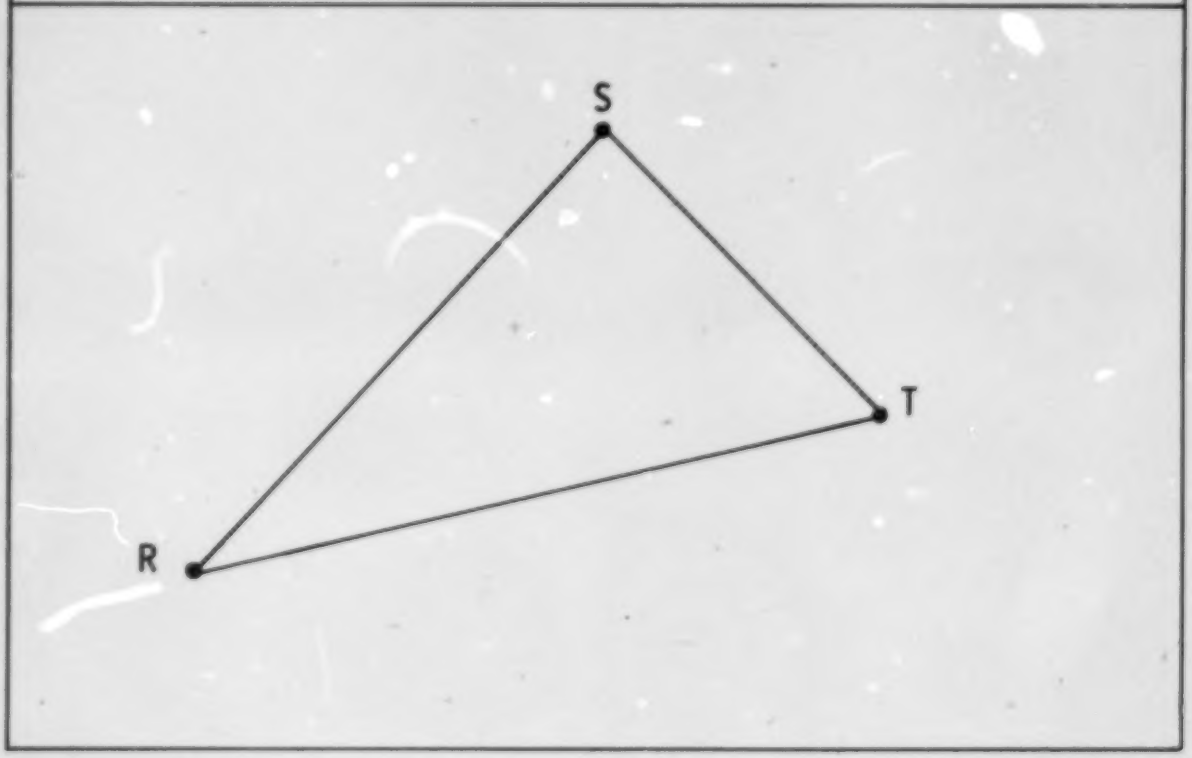
Mark the longest line segment.



Comparing Line Segments

Mark the line segment that is shortest.



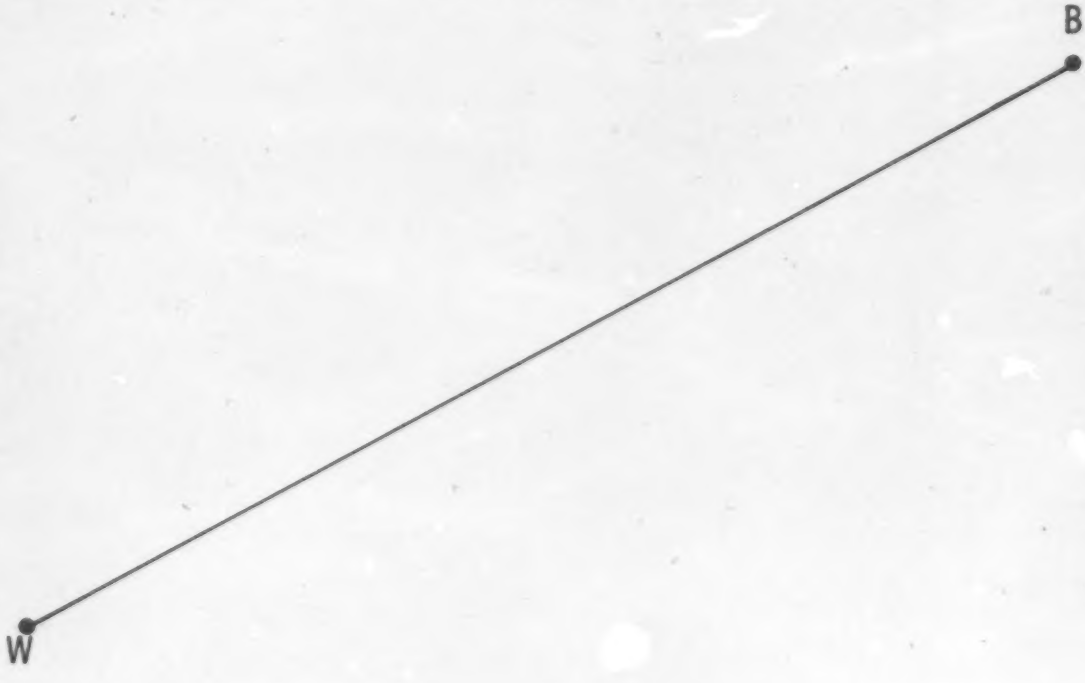


Measuring Line Segments

Use a unit segment to find each length.

The length of $\overline{CD}$ is between _____ and _____ units.

The length of $\overline{SR}$ is between _____ and _____ units.



The length of $\overline{WB}$ is between _____ and _____ units.

Measuring Line Segments

Use a unit segment to find each length.

The length is between _____ and _____ units.

The length is between _____ and _____ units.

The length is between _____ and _____ units.